

A COMPARISON OF RELATIONSHIPS OF
CERTAIN FACTORS TO THE READINESS
ABILITIES OF TWO GROUPS
OF FIRST GRADE PUPILS

A THESIS

SUBMITTED TO THE FACULTY OF THE SCHOOL OF EDUCATION, ATLANTA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS

BY

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SCHOOL OF EDUCATION

ATLANTA, GEORGIA

AUGUST, 1966

Rvii P. 87

DEDICATION

To My Devoted Husband

Joseph L. Wood

For His Continuous Inspiration, Interest
and Encouragement Throughout the
Writing of This Thesis

and

To My Loving Children

Joseph and LaVentriss Wood

D. T. W.

ACKNOWLEDGMENT

The writer wishes to express appreciation to the Troy City Board of Education in Troy, Alabama: Mr. Charles W. Thomas, Principal of Southside Elementary School, Troy, Alabama: Mrs. Minnie Cogborn and Mrs. Loretta Matthews, first grade teachers, parents, pupils and all who assisted in the development of this research. Special laurels to DR. LYNETTE S. GAINES, Adviser, and DR. R. L. SMOTHERS, Co-Adviser, who were untiringly patient and understanding and whose suggestions and constructive criticism were most invaluable. The pleasurable experience will never be forgotten.

The writer is also grateful to her husband and two children for their patience, understanding and encouragement shown throughout the research.

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CHAPTER I

INTRODUCTION

Rationale

Reading is of great importance in today's world. In the modern elementary school, reading is organized as a broad program in which everything a school does to promote growth in and through reading is considered an integral part. The child is seldom out of sight of printed materials challenging him to read. There are many situations in which he must read to protect himself from danger or destruction. Few, if any, vocations are open to the non reader. Reading is essential to good citizenship.

Success in school depends upon the child's being able to read. Teaching a child to read is the most important contribution to his development that a teacher can make. It is, therefore, the desire of all teachers to create a classroom environment rich in experiences which will contribute to effective learning.

Reading is the real "magic carpet" that carries boys and girls toward exciting new worlds of enjoyment and knowledge. The sooner pupils learn to read independently, the sooner they can find enjoyment in reading and make real progress in every phase of school work.¹

The concept of readiness for learning is basic to all instruction. A sensible and realistic approach includes a recognition of learning as continuous and of reading as having its own sequence.

¹Helen Huus, "Developing Reading Readiness," The Instructor, LXXIV (March, 1965), p. 61.

Since each child progresses at a pace that is his own, the first grade teacher can accept these children and adjust her readiness program to fit their individual needs.

Readiness for development of various reading skills taught in the first grade is a significant aspect of training. Many slow learners are penalized by teachers looking at the chronological age and assuming that it is time for them to learn to read. Others are handicapped by teachers who permit one intelligence test score to become the sole dictator of the time for beginning reading.¹

Many reading difficulties can be prevented if adequate attention can be given to reading in the first grade. As early as 1925, the National Committee on Reading gave explicit recognition to the fact that not all pupils who enter first grade are equally ready to read.²

Since the publication on the committee's report, intensive studies have been made of many issues relating to reading readiness. Readiness is a continuous factor. It is generally apparent in groups of children that some of them will have distinct differences, mentally, physically, socially and educationally. Individual differences in readiness for reading demand differentiated guidance activities.³

¹Lynette Saine, "The Slow Learner," The Instructor, LXXIV (March, 1965), p. 81.

²Walter Monroe, Encyclopedia of Education Research (New York: The Macmillan Company, 1950), p. 97.

³Mary M. Scobey and Wesley C. Souard, The Changing Curriculum and the Elementary Teachers (San Francisco: Wadsworth Publishing Company, 1961), pp. 228-229.

Many things determine readiness for systematic reading instruction. It is not a matter of age nor IQ. It is not mental maturity alone but the major characteristics are:

1. Biological, personal, social and socio-economic factors
2. Visual and auditory perception
3. Physical health and maturity
4. Freedom from directional confusion
5. Background experiences
6. Good listening and speaking habits
7. An interest in reading

In order to meet the educational challenge of today effectively, the writer feels that the teacher should have a wider knowledge of children, the way they grow, their interests, personality and social traits, and the way they learn. Once these developmental and underlying factors have been recognized, and she knows the sequence of teaching reading she can adjust her reading program to fit their individual needs.

Evolution of the Problem

The problem grew out of the writer's deep interest in the reading situation in the light of the large percentage of pupils who had reading difficulties. The principal and teachers were aware that there were too many children who were reading below their capacity. Concerned over this situation the writer sought to determine to what extent developmental factors, such as general intelligence, personal, physical, social

adjustment and socio-economic factors relate to the initial reading reading abilities of two groups of first grade pupils in her school. She hoped to present evidence of relationship in which understanding needed to be extended and deepened by further research.

Contribution to Educational Research

The writer hoped that the information contained in this study would prove valuable for those who were concerned with improving and guiding the adjustment of the first grade child's pre-reading activities. The findings in this study might also be used as an aid to the new teacher in making a better classification of the pupils in the first grade before (formal) reading is begun.

Statement of the Problem

The problem involved in this study was to compare the extent to which intellectual, physical, personal, social adjustment and socio-economic factors relate to the initial reading readiness abilities of two groups of first grade pupils with above-average and below-average academic performances respectively at the end of the school year 1965-1966.

Purpose of the Study

The major purpose of this research was to compare the relationship of reading ability to intellectual, physical, personal, social adjustment and socio-economic factors of a group of high and low achievers.

More specifically, the purposes of this research were:

1. To determine the general reading status of these two groups and differences, if any, which might exist.

2. To ascertain to what extent intellectual factors relate to initial reading abilities of above-average and below-average pupils.
3. To ascertain to what extent physical factors relate to initial reading readiness abilities of above-average and below-average pupils.
4. To ascertain to what extent social adjustment factors relate to reading readiness abilities of above-average and below-average pupils.
5. To ascertain to what extent socio-economic factors relate to initial reading readiness abilities of above-average and below-average pupils.
6. To formulate implications and recommendations which may be derived from analysis and interpretation of data.

Definition of Terms

The subsequent terms used for the purposes of clarity and consistency of this study are defined below.

1. The term, "intellectual factors," refers to the level of mental development which was measured by the Kuhlmann-Anderson Intelligence Test.¹
2. The term, "physical factors," refers to the good general health, visual and auditory efficiency.
3. The term, "reading readiness," refers to the developmental stage at which constitutional and environmental factors have prepared the child for reading instructions as measured by the Metropolitan Readiness Test.
4. The term, "personal and social adjustment factors," refers to the total complex patterns of feeling, thinking and acting, as measured by the California Test of Personality.
5. The term, "socio-economic factors," refers to the background of parents and siblings, economic status, home atmosphere and achievement of the individual or group.

¹F. Kuhlmann and R. G. Anderson, Kuhlmann-Anderson Test, Sixth Edition (Princeton, New Jersey: Personnel Press, Inc., 1964).

6. The term, "above average," refers to those pupils who fall above the mean of a distribution of scores derived from averaging of pupils respective performances.
7. The term, "below-average," refers to those pupils who fall below the mean of a distribution of scores derived from averaging of pupils respective performances on the Metropolitan Readiness Test.

Limitations of the Study

Significant limitations of this study were as follows:

1. The proposed study was limited to two groups of first grade pupils in Southside Elementary School, Troy, Alabama.
2. In an effort to determine the extent that intellectual, physical, personal, social adjustment and socio-economic factors influence or contribute to reading readiness abilities, no attempt was made to establish the socio-economic status, but rather to point out some of the factors that were involved in the reading readiness process.

Locale of the Study

This study was conducted at Southside Elementary School during the school year 1965-1966. Southside Elementary School is located on the south side of Troy, Alabama. The school has an enrollment of approximately 300 pupils, a principal, one secretary, 13 teachers, a cafeteria, 11 classrooms and a library.

Southside Elementary School, built in 1957, was designed with a dual purpose in mind. It was built to meet the needs of the present enrollment with foresight for enlargement for future increase in enrollment. The building comprises a multi-purpose room (which serves for a cafeteria, physical education, and numerous other activities), a teacher's lounge, a principal's office and secretary combined, classrooms, one that can be used for special education or

board room and other purposes. Most of the children's parents have low incomes. There are a few home owners. There are few families in the community with home libraries, and many homes contain no books. In general, books of any sort are not discussed in the home. Membership and attendance in the school's P.T.A. are good. Through the P.T.A. the parents are striving to improve the standards of the community.

Method of Research

The Description Survey Method of research employing the specific techniques of standardized tests, questionnaires, analyses of school records, and statistical analysis was used to gather the necessary data for the completion of this study.

Subjects and Materials

The subjects involved in this study were thirty-two first grade pupils of Southside Elementary School, Troy, Alabama. The chronological age range for the thirty-two pupils tested was 6 years 2 months to 7 years 9 months.

Materials and instruments used in this study were:

1. Survey tests
 - a. Metropolitan Readiness Test Form "R" and "S"
 - b. The California Test of Personality
 - c. Kuhlmann-Anderson Intelligence Test
2. Questionnaires
3. School Records
4. An Audiometer Test
5. Snellen and "E" Chart

Description of Materials

All the tests used for the purposes of this study were valid and reliable for the desired results of this writer. They are discussed below.

The Metropolitan Readiness Tests. Forms "R" and "S" were devised to measure the traits and achievements of school beginners that contribute to their readiness for first grade instruction. These tests are contained in a sixteen-page booklet comprising six separate tests: Word Meaning, Sentences, Information, Matching, Numbers, and Copying. The validity of the Metropolitan Readiness Tests--the extent to which the tests actually measure readiness for the first grade--may be judged in terms of the content of the test and of the correlation of Readiness scores with first-grade achievement.¹

The California Test of Personality was administered in order to measure emotional and social adjustment. The components of this test yielded 15 scores identified with evaluating the more intangible elements of the total complex patterns of (1) Personal Adjustment: (a) Self-reliance, (b) Sense of Personal Worth, (c) Sense of Personal Freedom, (d) Feeling of Belonging, (e) Withdrawing Tendencies, (f) Nervous Symptoms; (2) Social Adjustment: (a) Social Standards, (b) Social Skills, (c) Anti-social Tendencies, (d) Family Relations, (e) School Relations, and (f) Community Relations. The test is organized around the concept of life adjustment as a balance between personal and social adjustment.

¹G. H. Hilbreth and N. L. Griffiths, Metropolitan Readiness Test (New York: Harcourt, Brace and World, Inc., 1950), pp. 1-30.

Since this test is primarily concerned with an individual's feelings, convictions and modes of behavior which are changing in accordance with his experiences, the statistical reliability will sometimes appear to be somewhat lower than of good tests of ability and achievement. The items on Form AA and Form BB have been matched for equivalency as to difficulty, discriminative power, and internal consistency. The means and standard deviations are identical and the reliability data apply equally to both forms.¹

Several reviews concerning the validity of the California Test of Personality, Syracuse University² found that this test correlated more closely with clinical findings than any other personality test.

Taylor and Combs³ writing in the Journal of Consulting Psychology, provided additional evidence on the validity of the California Test of Personality. They tested 168 sixth grade pupils with the California Test of Personality and divided the children into two groups, the upper 50 percent (better adjusted) and the lower 50 percent (poorer adjusted). The test revealed a statistically significant difference in favor of the better adjusted group; that is the better adjusted half of the class checked a statistically significant larger number of self-damaging statements than the poorly adjusted half.

¹The California Test of Personality, 1953 Revision, L. P. Thorpe, Willis W. Clark, and Ernest W. Tiegs, Form AA, Primary Tests. (Los Angeles, California Test Bureau, 1964), pp. 7-15.

²Summary of Investigations Number One, Enlarged, California Test of Personality (Los Angeles: California Test Bureau, 1949), p. 7.

³Charles Taylor and Arthur W. Combs, "Self-Acceptance and Adjustment," Journal of Consulting Psychology, 16:89-91, April, 1952.

The Kuhlmann-Anderson Intelligence Test is designed to measure the pupil's intelligence and mental ability. It is divided into nine booklets for use from the first grade to maturity. The booklet used for this study contained eight tests, which measured ability in numerical and verbal relationships, reasoning ability and the ability to follow directions of various types. Bases are provided for interpreting the results in terms of the intelligence quotient (I.Q.) and also in terms of mental level age (M.A.). There are clear instructions for marking and scoring.

The manual does not include validity coefficients, but careful and accurate work was done on preliminary steps to insure validity and reliability of the test and the reliability of the norms.

The reviews¹ made on the Kuhlmann-Anderson Intelligence Test show little criticism on the subject matter of the test. The reviewers and critics state that on the whole, the tests are a reasonably good set. It is believed that the tests will continue to be used widely because of their brevity and relatively less depending upon skill than that required of most other group tests.

The Audiometer Test is designed to make possible a very exact and comprehensive determination of hearing acuity. Where facilities for securing a hearing test by means of the audiometer examination by a specialist are not readily available, the teacher can proceed

¹Oscar K. Buros (ed.), The Sixth Mental Measurements Yearbook (Highland Park, New Jersey: The Gryphon Press, 1965), pp. 101-103.

by testing one ear at a time, the subject receives the sound through a headphone or receiver held against the ear. The intensity is increased until the subject can just barely hear the sound, and it is decreased until he can no longer hear it. The entire procedure is repeated at several frequency levels in order to check for differential hearing loss. The zero point on the audiometer dial represents the intensity of sound which the normal "ear" can just barely hear on the audiometer.

When properly administered, audiometers have been found to yield retest reliabilities ranging from .70 to .87.¹

The handedness of each child was observed by using several of Halfner tests. (1) Throwing tests - A rubber ball was placed on a table or desk directly before the pupil and the pupil was asked to throw it back to you. This was repeated three or four times with the examiner standing ten or fifteen feet away, either before the desk or behind it, so that the pupil had to turn around before throwing the ball. (2) Receiving tests - The examiner stood about three feet in front of the pupil and held the ball in the hand, moved it forward fairly rapidly directly toward the center of the body just about the waistline after asking the child to take the object when it was presented. This was repeated three or more times. (3) Other tests of similar purpose were used, using a spoon to dip peanuts from

¹Anne Anastasi, Psychological Testing (New York: Macmillan Company, 1954), pp. 390-392.

a bag, using scissors to cut a piece of paper, using cloth to dust a desk and shooting marbles. It was apparent that there is really no such thing as handedness for all arts. Handedness was found to be a matter of degree.

The Snellen Chart (distributed by American Optical Company, Southbridge, Massachusetts) was used because a more comprehensive test was not available. It measured visual acuity at a distance of 20 feet and will detect nearsightedness. The "E" Chart was also used, response was made from this test by having the child indicate in which direction he saw the "E" pointing. Failure on this test and success on the Snellen Chart indicate farsightedness while success on this and failure on the Snellen Chart indicate nearsightedness. The children were referred to the school Health Clinic for further testing.

Research Procedure

The procedural steps used in this study were the following:

1. Permission to conduct the study was secured from the proper persons in authority.
2. A further study of related literature was made in order to obtain more information about the factors involved in the reading readiness process.
3. School cumulative record folders were used to secure pertinent information relative to such factors as health, previous achievement (kindergarten) and background information.
4. The subjects for this study were selected as "above-average" and "below-average" achievers on the basis of those pupils who fell above and below the mean of a distribution of scores derived from the averaging of pupils performances on the Metropolitan Achievement Tests.

5. Questionnaires were sent to parents. General information was obtained concerning the socio-economic status of the family, education, travel, reading materials, social adjustment and emotional stability.
6. The Snellen and "E" Charts were used to test the vision of the pupils.
7. Data derived from the tests and questionnaires were tabulated in appropriate tables or charts and treated statistically as indicated by the purposes of the research.
8. The tests for comparison of the two groups were based upon the computation and use of the following statistical measures: mean, standard deviation, difference between the means, and the "t" ratio for measuring significance of differences, Pearson Product Moment Coefficient of Correlation, and "z" for purposes of comparing differences between correlations.
9. The statements of findings, conclusions, implications, and recommendations derived from the comparison and interpretation of the data were taken and formulated in the finished thesis copy.

Survey of Related Literature

The following paragraphs under the general heading of survey of related literature have been arranged to present developmental factors which relate to the reading readiness abilities of first grade pupils.

Introductory statements. -- Children show strong developmental and personality differences at all ages, but in teaching reading, there is the tendency to project the concept of a standardized beginner who will respond exactly as we would wish. Many problems for the child and his adult well-wishers spring from this common misconception. The teacher cannot sit back and wait for children to attain readiness for reading. Instead she must look for

the qualities that a child may acquire in early years to help him in such a difficult job as learning to read.

She can determine when children are physically, mentally, emotionally and socially mature enough for beginning reading by using intelligence tests, reading and readiness tests and systematic observations.

Quality and quantity of achievement are always influenced by the general health status of the pupils. A child with low general health is likely to be listless, to be readily fatigued, and to have a much shortened attention span. Defects in vision may hinder a child in learning to read. Faulty vision may cause strain and discomfort for the child, making him nervous, and fatigue. The child who must strain his eyes to read is not likely to enjoy the process and will usually try to avoid reading. If his vision is so poor that even with considerable effort, it is difficult or impossible for him to differentiate between the forms of letters, success in reading will be delayed until he is given reading materials printed in type that he can read comfortably.¹

Description of physical factors. -- All teachers should be alerted to signs of visual difficulties among their pupils. Among these difficulties are: facial contortions, book held close to face; tense during visual work, tilting head; head thrust forward,

¹Ruth Strang, Constance McCullough and Arthur Traxler, The Improvement of Reading (New York: McGraw Hill Book Company, 1961), p. 313.

body tense while looking at distant objects as blackboard and charts; poor sitting position; rubbing eyes frequently; tending to avoid close visual work and tending to lose place in reading. When two or more of these persist, a child is more likely to need visual attention.¹

However, it must not be assumed that poor vision is generally the chief cause of poor reading. Cases of near-sightedness, far-sightedness, astigmatism, muscular imbalance, and lack of fusion are found among both good and poor readers. Nevertheless, in both groups such conditions tend to result in fatigue and consequent loss in reading ability. Quite probably nearly all readers who have visual defects would improve in reading ability if their defects were corrected.

Since most reading involves near-point vision, it is important for the teacher to recognize the differences between far-point and near-point vision. A child whose vision tests normal when looking at a distant object but who has great difficulty in seeing an object singly and clearly at a distance of fourteen inches or less is in need of attention. In such cases glasses or visual reduction or both are needed.²

Auditory acuity may be an important factor in regarding reading readiness because the child first learns to attach meaning to

¹Guy Bond and Miles A. Tinker, Reading Difficulties (Appleton-Century Crofts, Inc., 1962), pp. 91-92.

²Bond and Tinker, op. cit., p. 29.

printed symbols through the medium of spoken language. Since learning to read under most methods depend to a degree upon speech, any appreciable speech retardation due to hearing impairment may become a contributing factor in reading disability. Hearing impairment often leads to emotional maladjustment which may become tragic in its effect upon a child's personality.¹

The alert teacher will note signs of hearing difficulty in a child's behavior. Hearing impairment may be suspected if a child is inattentive and frequently asks to have statements repeated or misunderstands simple directions. Other signs include reports of ringing and buzzing in the head, tilting of the head, turning one ear toward the speaker, cupping a hand behind the ear, sitting with a blank expression on face, scowling plus strained posture in listening, and turning radio or phonograph on unusually loud.

How seriously a hearing defect interferes with learning to read depends in part on certain accidental factors such as the position in the seating arrangement in the classroom, the tone of and clarity of the teacher's voice, and also upon the form of instruction employed in the reading program. A child may be hard of hearing because of some infection or other disease which proper medical treatment could remedy. Only a physician can discover the cause and give the proper treatment.

¹Ibid.

Description of language factors. -- The teacher should help the child with deficient hearing in every possible advantage. She should change his seating position and give individual or special attention in correction with oral work. There should be unusual amounts of self-aids of a printed or visible sort and modify to some extent word recognition and other phases of reading.

One of the objectives of first grade programs, before and after reading instruction is begun, is to help the pupil express himself well orally. The child who is unable to talk in short, simple sentences is unable to anticipate the meaning of a sentence. Speech is most important in the reading skills.

The following principles should govern the procedures for promoting good speech development.

1. Most speech improvement comes about through informal classroom activities.
2. Provision should be made for a large number of enriching experiences that give opportunity for improved oral expression.
3. Attention should be given to enunciation and pronunciation, adequate speaking vocabulary and an interest in speaking with or to others.
4. Pupils who need help in speech should be given opportunity for special practice.
5. The teacher's own speech habits should be a suitable model for the children.
6. The teacher should not do all the talking.
7. The atmosphere of the classroom should encourage children to converse freely at appropriate times.¹

¹Martha Dallmann and John Deboer, The Teaching of Reading (New York: Holt, Rinehart and Winston, Inc., 1960), pp. 61-62.

Certain defects in speech require the attention of a speech specialist - cases of stuttering, cleft-palate speech, spastic speech, aphonia, persistent hoarseness, and mutism, as well as the speech accompanying hearing defects. The teacher cannot hope to diagnose these difficulties properly, but it is important for her to identify them and to distinguish them from less serious defects. The more common speech faults can be recognized by the teacher and most of them treated by her. Lisping and most forms of defective articulation, omission, transposition, and substitution of sounds; indistinct speech; foreign accent; stuttering; and various vocal difficulties, such as the nasal and denasal, the monotonous and high-pitched voice, the teacher should learn to recognize these. Before remedial work in speech is undertaken, it is important that the speech defect or speech fault be carefully diagnosed. It would be wise for the teacher to give a speech test at intervals during the year.

Description of personal adjustment factors. -- Gates states that success in reading depends in no small measure upon the kind of mental and emotional adjustment the pupil makes to the learning situation. The pupil who desires to learn to read, whose emotional adjustment is favorable - who finds satisfaction in his reading achievements, and who realizes the importance of reading in his daily life is more likely to read than one of similar equipment whose adjustment is less favorable.

Inability to read may itself create emotional problems. There are three principal ways of accounting for relationship between emotional

difficulties and reading problems.

1. In some cases unfavorable conditions produce reading failure and consequent emotional problems.
2. The second situation is one in which emotional factors may lead to reading failure.
3. Reading disability and emotional problems usually have a reciprocal relation.¹

Personality is a dynamic unity that embraces both emotional factors and reading performance. The individual's response to the printed page is conditioned by his self-concept and by various other aspects of his personality. Among the personality characteristics that have been observed in reading cases are anxiety, fear, tension, withdrawal of effort, lack of sustained attention, antagonism to school, compensatory interests and general lack of emotional and social responsiveness.²

Everything that is known about environmental forces in personality development points to the assumption that the individual who is emotionally capable of utilizing critical-mindedness and reasonable judgment in attacking problems will have these powers developed and made more effective by years of practice in situations which may require them.³

¹Arthur I. Gates, The Improvement of Reading (New York: Macmillan Company, 1954), p. 110.

²Ruth Strang, Constance McCullough and Arthur Traxler, The Improvement of Reading (New York: McGraw Hill Book Company, 1961), p. 64.

³Lillian M. Logan and Virgil G. Logan, Teaching the Elementary School Child (Boston: Houghton Mifflin Company, 1962), p. 194.

Each stage of development brings with it not only new problems but new dangers, new anxieties, and new challenges. How the child relates himself and his needs and drives to the world of people, processes, and things determines the health of his emerging personality. Growing up in society is not a simple matter. Neither is developing a healthy personality. The child's thoughts, perceptions, actions and behavior differ from those of the mature individual. As the child develops, he must learn to maintain a fine balance between the organismic demands, the emerging self, and the demands of society. By doing this he resolves the conflicts that arise, he develops personality by building new strengths and adding new components.¹

The development of personality is subject to certain inner laws, just as the biological organism develops according to a plan, the various parts arising at a proper time until they are all functioning as an entirety. In the first grade the child needs to develop a healthy personality. By this time the child should have gone a long way toward developing self-reliance or adequacy.

Description of social adjustment factors. -- Aiding the pupils in social adjustment is the chief task of the first grade and an important function of any public school. It involves achievement of the kinds of social skills which enable one to be liked by a wide range of persons, to like them in turn, to mingle easily with them,

¹Ibid.

and to work smoothly with them. The primary goal of adjustment is effective reworking of both one's environment and one's self so as to achieve goals which are regarded as important.¹

A certain amount of strain in the adjustment to school is inevitable for most children. The problem of the first grade child is to cope with both home and school pressures. The expectations of cultures the long school day, the physiological instability of this age require that the first grade teacher be relaxed, friendly, interested, and willing to give attention to six-year-old feelings, comments, questions, drawings, paintings, stories, and problems - and not of one child but of thirty. Flexibility and creativity must be the keynote for the curriculum.²

All children have problems. They try to find ways to satisfy their needs but for various reasons may be unsuccessful. When the pattern of non-success becomes established they resort to other means of satisfaction, or they withdraw from these symptoms of behavior as lying, cheating, stealing and withdrawing or day-dreaming. It is important that the teacher be alert to all types of behavior indicative of unsatisfied needs. He must try to discourage whatever causes the lack of satisfaction.

¹Morris L. Bigg and Maurice P. Hunt, Psychological Foundations of Education (New York: Harper and Row Company, 1962), pp. 86-87.

²G. Orville Johnson, Education for the Slow Learners (New Jersey: Prentice-Hall, Inc., 1963), p. 308.

Since behavior of a social nature is also learned, the causes for observed behavioral differences can be explained for slow learners on the same basis as for normal children. The major deviation of both is in their general cultural and socio-economic background. Most slow learners come from deprived homes where they receive relatively little psycho-social stimulation of a desirable nature as compared to most children. Evidence indicates the environmental stimulation is inadequate both qualitatively and quantitatively. Many of them quite possibly would be able to operate at higher intellectual levels if early stimulations were provided.¹

Description of socio-economic factors. -- Cultural conditions in the home may also be related to reading development. The educational and professional status of the parents, the number of books owned by the student and by his family contribute greatly to the reading development of the learner. Many personal, social and cultural factors combine to create a predisposition to reading in a certain manner, critically, accurately, selectively, or otherwise.

Conditions in the home have an important effect upon a child's personality adjustment before he goes to school and during the school years. A child is fortunate if the home environment provides love, understanding, an opportunity to develop individuality, and a feeling of security. On the other hand, a number of unfortunate home conditions may bring about emotional maladjustment in the child. Quarreling parents, broken homes, neglect of the child, overprotection

¹Ibid.

or domination or anxiety on the part of parents and unhealthy rivalry among children in the family are likely to produce nervous tension and develop feelings of insecurity.¹

Any one or a combination of socio-economic factors may result in unfortunate personality adjustment in the child. In general, the gratifications achieved through reading may provide the child a way of escape from trying environmental pressures. Unfavorable home conditions hinder rather than help reading progress.

Description of intellectual factors. -- Reading achievement tends to be related to intelligence at all academic levels. To a certain degree, less than normal intelligence places a limit on attainment in learning to read. Even though dull children may become reading disability cases, they can be taught to read up to the level indicated by their mental capacity. Intelligence seems to play a role in how well a pupil continues to gain in reading ability after a short period of intensive clinical training.²

Some intellectual factors are brought about by training and experience. From experimental data available, the single factor which most accurately determines readiness to read is that of mental age. When we find that a child has mental age for reading readiness, that fact alone does not insure reading success as has been found by various experiments done in this field. It is safe to state that a

¹Guy L. Bond and Miles A. Tinker, Reading Difficulties (New York: Appleton-Century Crofts, Inc., 1961), p. 109.

²Ibid., p. 115.

mental age of at least six years must be reached before success will be probable and we can be more certain if the child's mental age is six years and six months.¹

Intellectual maturity plays a part in determining reading readiness. The fact that there seems to be no specific mental age that can be used as a determining factor in deciding when to start beginning reading activities does not mean that pressure to learn to read can safely be put indiscriminately on all first-graders. Other things being equal, which they seldom are in situations involving pupils, children with high I.Q.'s are more likely to learn rapidly than children with low I.Q.'s. Correlations of scores on intelligence tests with measures of reading progress tend to fall between .35 and .65. Furthermore, certain pre-reading skills are closely related to general intellectual ability.²

Description of reading readiness. -- In the average first grade, the children's attitudes toward learning to read may range from disinclination to indifference and to anticipation. There are many other respects, in first-grade children reveal great differences. They differ in mental, physical, social, emotional, and other educational or psychological factors which are discussed in the preceding paragraphs. To determine when and how to begin syste-

¹M. Lucile Harrison, Reading Readiness (New York: Rivers de Press, 1960), p. 60.

²Margaret G. McKim and Helen Caskey, Guiding Growth in Reading (New York: Macmillan Company, 1963), pp. 37-38.

matic work in reading, the teacher needs to know to what extent each pupil possesses the essential elements. No one element of reading readiness alone should be considered in determining when systematic instruction in reading should begin. Children lacking in one readiness factor may possess others that will justify teaching them to read.

Some pre-requisites for reading are common to all learning. Among four which are most essential are: (1) an eagerness to be independent rather than spoon-fed and coddled; (2) an unquenchable zest to explore the new in the big, widening world about him; (3) the courage to try himself out at new skills and to take success and some defeats; (4) the enjoyment of being with others and learning from them.¹

Much is made of waiting for "life" to develop readiness naturally. Some children are not well adjusted enough socially and emotionally to succeed in reading. The reading teacher should realize that it is not enough to know the factors that promote or prohibit adequate reading performance. She must examine the composite of factors and on the basis of them must identify each pupil's specific readiness for reading.

The reading program must be individualized for each pupil. The child who is unhappy, who has poor relationship with his peers, family, other adults and who lacks confidence in himself has a diffi-

¹Roma Gans, Common Sense in Teaching Reading (New York: Bobbs Merrill Company, Inc., 1963), p. 20.

cult time learning to read. These children must be identified and helped in order to adjust to the necessary preliminaries in learning to read.

Intelligence tests could be used by the teacher along with systematic observations in order to determine when the child is physically, mentally, emotionally and socially mature enough for beginning reading.

McKim and Caskey state that the reading readiness test should be chosen to meet the needs of a particular situation. They are not essential to an effective reading program but can be of value in providing additional evidence against which a teacher can check her judgment of the probable success of individuals and groups. Therefore, the type of test and the time at which the test is given should both be planned with the needs of the teacher in mind.

Three main types of readiness tests are available, the first of which is the Metropolitan Readiness Test. It is a test of educational readiness that explores broadly the skills needed for first-grade activities. The second type of readiness test measures pre-reading skills specifically on the Gates Reading Readiness Tests and the Lee-Clark Reading Readiness Test. The third test consists of reading readiness material found in many of the present-day series of basal readers. They are designed to measure specifically the child's ability to progress into the beginning - reading materials to given series.¹

¹Margaret G. McKim and Helen Caskey, Guiding Growth in Reading (New York: The Macmillan Company, 1963), pp. 49-50.

The authors further state that the test should be given at a time that will provide the most help in planning pre-reading experiences. After reading readiness tests are administered and results recorded, the teacher can go further in determining to what extent developmental factors influence reading-readiness abilities. She can observe the children who lack reading for readiness in terms of their language development and background experience. These pupils should have a prolonged readiness program in school. These experiences should include:

1. Listening to stories read or told by the teacher.
2. Taking field trips to parks, farms, zoos, dairies, airports, fire stations and other points of interest.
3. Using and listening to tape recorders and listening stations.
4. Hearing records.
5. Seeing movies and filmstrips.¹

The concept of reading readiness is widely accepted as the first level of development in reading. The readiness period is an actual stage of growth and preparation for the complex task of interpreting printed symbols and includes all the reading development that precedes actual reading from a book. Readiness for reading involves within a child a combination of certain stages of physical, emotional, social, and mental maturity with certain understandings, skills, purposes, attitudes, and information.

¹Warren C. Cutts, "Readiness Unreadiness in the Underprivileged," NEA Journal, LII (April, 1963), p. 23.

Readiness can be determined when the child shows the following developments:

1. The eyes should be developed to the point where the child is able to see well and focus exactly.
2. The ears should be developed to the point where the child can hear distinctly, and can relate certain sounds to symbols or understandings.
3. The child should be able to speak correctly and accurately. His vocabulary has reached approximately 2,500 words and is constantly being enriched. The language facility is of great importance in reading readiness.
4. The child who is ready to read is socially a relatively happy child. He is successful much of the time in his manipulative efforts, and demonstrates emotional security in his relationship with others.
5. The mental development of the child who is ready to read indicates that he has a good understanding and use of concepts and word meanings, and the ability to organize and classify ideas.
6. To begin to learn to read, the child should have an adequate background of experience.
7. Finally, the child who is ready to read must have a real interest in learning to read.¹

It is important that all the personnel of a school system have an understanding of the problems of readiness.

Elementary school educators know that many of the pupils who are not promoted have failed because of the inability to read. This outcome suggests that many children might have succeeded from

¹Wesley G. Sowards and Mary Scobey, The Changing Curriculum and the Elementary Teacher, (San Francisco: Wadsworth Publishing Company, Inc., 1961), pp. 229-230.

the beginning had their instruction been as well adjusted to their needs as the remedial teaching.¹

Educational psychologists list these significant principles of readiness:

1. Children generally become ready for specific learning tasks at different ages.
2. The child develops skills most readily if they are built upon the natural foundation of maturational development.
3. Children should not be forced into readiness training before maturational development is adequate.
4. Generally, the more mature the child is the less training is needed to develop a given proficiency.
5. The teacher can promote the child's readiness by providing for gaps in his experience.²

On the basis of these principles, Harris states that, "Without maturation the child cannot learn; without experience he has nothing to learn." Readiness programs are not useless. Children need appropriate environmental stimulation if maturational development is to progress at an appropriate rate. In many instances, the child benefits greatly from readiness experiences. The teacher can not overemphasize either maturation or experience learning.

Too much emphasis on maturation may lead to useless postponing of what could be learned; too much emphasis on learning or

¹Lillian Orme, "Building Reading in First Grade Children Through Special Instruction," Reading on Reading Instructions, Thirty-fourth Yearbook of the National Elementary Principal, XXXV (New York: David McKay Company, September, 1955), p. 83.

²Emerald V. Dechant, Improving the Teaching of Reading (New Jersey: Prentice Hall, Inc., 1964), pp. 127-129.

experiences may lead to futile attempts at teaching that for which the child is not ready.¹

The teacher can determine when children are physically, mentally, emotionally and socially mature enough for beginning reading by using intelligence tests, reading and readiness tests and by systematic observations. These observations should be recorded on readiness inventories, a good means for identifying who is ready for reading.

Description of research findings. -- Smith and Dechant indicate that scores on reading readiness tests are not completely accurate predictors of reading achievement. Perhaps their greatest value is in the diagnosis of the pupil's deficiencies. They further indicate areas of strength and weakness and help the teacher in making adequate provisions for individual needs.²

Kottmeyer states that the use of readiness tests to determine the child's readiness to read is highly warranted. However, tests alone are not always highly reliable in predicting a child's success in learning to read; when coupled with teacher judgment they are highly useful. He also found that neither teacher judgment alone nor tests were as useful as the two used together.³

¹Albert J. Harris, Effective Teaching of Reading (New York: David McKay Company, Inc., 1962), p. 3.

²Henry P. Smith and Emerald V. Dechant, Psychology in Teaching Reading (New Jersey: Prentice Hall, Inc., 1961), pp. 416-419.

³William Kottmeyer and Others, "Reading Readiness in St. Louis Public Schools," The St. Louis Schools Journal, I (April, 1961), p. 24.

One study made in St. Louis showed more than a third of the 4,000 pupils tested as unready for systematic reading instructions at the outset of the school term.¹

As a result of the study of school provisions for beginners in California, Russell and Hill concluded that 30 percent of the children needed to be in smaller classes and required more individual attention if they were to achieve satisfactory growth in the first grade.²

At all times the reading program in the first grade should be planned for the continued development of the skills necessary for reading progress. If this is done properly by presenting a varied and rich reading readiness program, the first grade teacher is assured of guiding a maximum number of pupils to success in reading. Success in learning depends greatly upon the stage of all-around development which the child achieved. Reading disability is frequently caused by starting a child in a standard reading program before he has acquired the necessary readiness which will assure success in the reading program.³

¹Nila P. Smith, "Readiness for Reading and Related Language Arts," Research Bulletin of the National Conference on Research in English (April, 1950), p. 5.

²David Russell and Ruby L. Hill, "Provisions for Immature Five and Six-Year Olds in California Schools," California Journal of Elementary Education, XVII (May, 1948), p. 220.

³Guy L. Bond and Miles A. Tinker, Reading Difficulties (New York: Appleton-Century Crofts, Inc., 1961), p. 115.

Marcy C. Petty found in her study, ("An Experimental Study of Certain Factors Influencing Reading Readiness"), that variations in home conditions, or the existence of social, health, disciplinary, or personality problems might outweigh the influence of certain other factors that correlate highly in general with success in learning to read.¹

Studies, conducted at Atlanta University during the past years, concerning reading readiness have brought out interesting and revealing findings. Some of the findings that the writer found interesting to her study are viewed in the following paragraphs.

Hoover found in her study of reading readiness, using fifty-two children from Spelman College Nursery School, that reading readiness to a marked degree is influenced to the extent to which children are accelerated in mental age.²

Wall made the following reference to the significant importance of developmental factors which influence reading readiness factors among first grade pupils, despite the quantity of experimental and developmental data, the wealth of ingenious teaching devices. The range of interesting children's material that the readiness program is uneven and the extent of readiness is dependent upon factors

¹Marcy C. Petty, "An Experimental Study of Certain Factors Influencing Reading Readiness," Journal of Educational Psychology, XXX (June, 1939).

²Annele Hoover, "A Study of Reading Readiness in Fifty-two Children of Spelman College Nursery School," Atlanta, Georgia, (unpublished master's thesis, School of Education, Atlanta University, 1943).

which may require additional activities or extended experiences. She also found that no one factor can determine the extent of reading readiness. Teachers should take under advisement the use of teachers' ratings as a method of predicting readiness for reading along with the standardized instruments.¹

In making a study on the "Predictive Validity of Two Methods of Determining Reading Readiness," Thurman concluded that more time should be given to determine the reading readiness of the first grade child. She also stated that further study should be made to determine the extent of experiences needed for pupils in the community who are below average. She suggested that further studies be made to determine where improved pre-school activities are needed to heighten readiness and beginning reading success.²

The writer believes that provisions of interesting experiences during the readiness period in bridging the gap for not only providing children with content of what to say, but she hopes that it will build the vocabulary with which to say it.

Summary of Pertinent Points from the Review of Related Literature

The many studies just reviewed have attempted to enumerate the various capacities and function upon which learning to read

¹Ruth Lyles Wall, "Analysis of Some Developmental Factors Influencing Reading Readiness Among First Grade Pupils," 1961-1963, (unpublished master's thesis, School of Education, Atlanta University, 1953).

²Margaret Morton Thurman, "The Predictive Validity of Two Methods of Determining Readiness for Reading," (unpublished master's thesis, School of Education, Atlanta University, 1963).

depends. The authorities agreed that a pupil's general intelligence, his language aptitude, his vision and hearing, his general health and vigor, his emotional balance, and various other fundamental characteristics affect his ability to learn to read at every stage, from the first lesson to adult life. Retardation or serious deficiencies in any one of these components of a pupil's equipment may seriously interfere with his progress in reading and may limit the level of attainments in reading ability.

Finally, authorities all agreed on the following observations:

1. Reading disabilities result from failure to identify all possible handicaps and to arrange instruction in such a way that they are directly or indirectly surmounted. The causes of reading disability are many; they are not caused by any one single factor, but a combination of factors may be involved; the remedies lie in improved, especially highly individualized, instruction.
2. The child is seldom out of sight of printed materials challenging him to read. There are many situations in which he must read to protect himself from danger or destruction. Few, if any, vocations are open to the non-reader. Reading is essential to good citizenship; a child must be able to read in order to think through clearly and evaluate sufficiently.
3. When a personality adjustment is truly a cause of the reading difficulty, it is not easy to tell whether a symptom is cause, effect, or concomitant, but it is advisable to use every reasonable means of discovering the role of the maladjustment. Personal factors interfere with satisfactory reading growth or the inability to make adequate gains caused by dissatisfaction.
4. Social adjustment and socio-economic factors were found to be contributing factors in reading readiness ability. The pupil who recognizes desirable social standards is the one who has come to understand the rights of others

and who appreciates the necessity of subordinating certain desires to the needs of the group. Without this kind of social adjustment, the pupil may develop mental adjustment which may produce emotional resistance to learning to read. The pupil who exhibits desirable family relationships is the one who feels that he is loved and well-treated at home, and who has a sense of security and self respect in connection with the various members of his family. On the other hand, a number of unfortunate home conditions may bring about emotional maladjustment in the child.

5. Auditory acuity may be an important factor in regarding reading readiness because the pupil first learns to attach meaning to printed symbols through the medium of spoken language. Hearing impairment often leads to emotional maladjustment which may become tragic in its effect upon a child's personality. Poor vision or hearing, physical disabilities, and unfavorable environmental conditions are also contributing factors in reaching reading abilities.
6. Cultural conditions in the home were found to be related to reading development. The educational and professional status of the parents, the number of books owned by the pupil and his family contribute greatly to the reading readiness abilities.

Finally, the authorities all agreed that there can be little doubt that other things being equal, the wider and richer a child's experiences and greater his range of information, the better he is equipped to learn to read.

CHAPTER II

PRESENTATION AND ANALYSIS OF DATA

Introductory Statement

Data recorded in this section of the thesis provide information of a comparative nature which fulfills the objective of comparing the extent, if any, to which certain factors relate to the reading readiness abilities of two groups of first grade pupils with above-average and below-average performances. These are presented in such a manner as to answer questions relative to the hypothesis as posed in the statement of the problem.

Information is provided in the description of the pupils' performances on the (1) Metropolitan Reading Readiness Tests used as a basis for determining the reliability of reading readiness, (2) the Kuhlmann-Anderson Test which was used as a basis for determining the reliability of the intelligence quotient in predicting readiness for reading, (3) the California Test of Personality was used as a basis for identifying and revealing the status of certain highly important factors in personality and social adjustment in predicting readiness for reading of the two groups, (4) questionnaires from parents and pupils were recorded to provide data about socio-economic factors in predicting readiness for reading. These data were treated with respect to the purposes of the study. The main statistical measures were the mean, the standard error of the mean, standard deviation, standard error of the difference between

the means, the "t" ratio for measuring significance of differences, Pearson Product Moment Coefficient of Correlation, and "z" for purposes of comparing differences between correlations. In other instances certain factors were treated by means of percentages and observation for evidence of comparisons and relationships.

The subjects for this study were chosen during the school year, 1965-1966. The first grade of Southside Elementary School, Troy, Alabama was chosen for the study.

The Metropolitan Reading Readiness Tests, forms "R" and "S", were administered. The Kuhlmann-Anderson Intelligence Test was administered in April and May 1966, and the California Test of Personality was administered in April and May 1966.

Health data were gathered from school records. Vision and hearing tests results were recorded for the two groups of subjects studied. Questionnaires were used to gather information concerning social adjustment and emotional stability and to gain insight into the general background of the family, education, travel, pupils' interest, reading materials, mass media found in the home, and the attitude of parents toward education.

Results of Performances on the Metropolitan Reading Readiness Test

The data on the Metropolitan Reading Readiness Test obtained by sixteen above-average and sixteen below-average pupils in the Southside Elementary School, Troy, Alabama, 1965-1966, (September

1965) presented in Table 1, page 39 and are analyzed and interpreted in the separate paragraphs below.

Above-average pupils. -- For the sixteen above-average pupils, the scores ranged from a low of 53 to a high of 61, with a mean of 57.0. The standard deviation was 2.3, and the standard error of the mean was .575. There was one pupil who scored "superior", eleven scored "high normal", and four scored "average."

Below-average pupils. -- For the sixteen below-average pupils the scores ranged from a low of 19 to a high of 46, with a mean of 37.25. The standard deviation was 2.1, with a standard error of the mean of .568. There were ten pupils who scored "low-normal" and six scored "poor-risk."

The "t" ratio of comparative data. -- Table 2 shows the scores for the difference between the two groups as follows: The mean was 57.0 and 37.25 for the above-average and below-average groups, respectively. The difference between the two means was 19.75 with a standard error of 1.09. This indicated a "t" of 2.5 which was more than 2.04 at the (.05) percent level of confidence with 30 degrees of freedom. Therefore, the difference in reading readiness test of performances between the above-average pupils and the below-average pupils was significant.

Interpretation. -- A summary of the data analyzed and compared above would appear to indicate that the Reading Readiness status obtained by the above-average pupils was much higher than the Reading

TABLE 1

DISTRIBUTION OF THE INITIAL READING READINESS SCORES MADE ON THE METROPOLITAN READING READINESS TEST BY SIXTEEN ABOVE AVERAGE AND SIXTEEN BELOW AVERAGE FIRST GRADE PUPILS IN THE SOUTHSIDE ELEMENTARY SCHOOL, TROY, ALABAMA, 1965-1966

Subjects	Above-Average Pupils		Below-Average Pupils	
	Scores	Reading Status	Scores	Reading Status
1	61	Superior	46	Low Normal
2	60	High Normal	46	Low Normal
3	60	High Normal	46	Low Normal
4	59	High Normal	45	Low Normal
5	58	High Normal	45	Low Normal
6	58	High Normal	44	Low Normal
7	58	High Normal	44	Low Normal
8	58	High Normal	43	Low Normal
9	57	High Normal	42	Low Normal
10	56	High Normal	40	Low Normal
11	56	High Normal	32	Poor Risk
12	56	High Normal	29	Poor Risk
13	55	Average	27	Poor Risk
14	54	Average	25	Poor Risk
15	53	Average	23	Poor Risk
16	53	Average	19	Poor Risk
Mean	57.0		37.25	
S. E. M.	.575		.568	
S. D.	2.3		2.1	

TABLE 2

MEASURES OF DIFFERENCE BETWEEN THE ABOVE-AVERAGE AND BELOW-AVERAGE GROUPS IN TESTED MEASURES OF PERFORMANCES ON THE METROPOLITAN READING READINESS TEST

Groups	Mean	S.D.	S.E.M.	$M_1 - M_2$	S.E. $M_1 - M_2$	"t"
Above-Average	57.0	2.3	.575	19.75	1.09	2.5*
Below-Average	37.25	2.1	.568			

*Significant value for "t": 2.04

Readiness status obtained by the below-average pupils in the area of Reading as measured by the Metropolitan Reading Readiness Test.

Further, the question still remains as to what extent the factors of socio-economic status could or did significantly alter the observed performance of these first grade pupils. However, it is apparent from the test results to what extent there was a difference in performance in observed initial reading readiness of these pupils from the results on the Metropolitan Reading Readiness Test used in this study.

More significantly, perhaps, there remains the question as to what extent the socio-economic background and the school experiences between the two groups would or did significantly affect the level observed by the Metropolitan Reading Readiness Test for the above- and below-average pupils who were the subjects of this research.

Results of Performances on the
Kuhlmann-Anderson Test

The data pertaining to intelligence test performances of the sixteen above-average and sixteen below-average subjects of this study are presented in Table 3, page 42, and are analyzed and interpreted in the separate paragraphs below.

Above-average pupils. -- For the sixteen above-average pupils the I.Q. scores ranged from a low of 99 to a high of 119, with a mean of 105.6, and a standard error of the mean of 10.4, a standard deviation of 10.6. The mean I.Q. index of 90 indicated that the pupils in the above-average group were approximately at the norm of expectancy in mental growth and development.

Below-average pupils. -- For the sixteen below-average pupils the I.Q. scores ranged from a low of 72 to a high of 92, with a mean of 57, and a standard error of the mean of 1.6, a standard deviation of 1.8. The mean I.Q. index of 90 indicated that sixteen pupils in below-average group were below the norm of expectancy in mental growth and development.

The "t" ratio of comparative data. -- Table 4 shows further the scores for the difference between the two groups as follows: The mean was 105.6 and 89.56 for the above- and below-average groups, respectively. The difference was 16.04 and the standard error of the difference between the two means was 1.4 to indicate a "t" of 1.51 which was not significant at the five percent level of confidence, with 30 degrees of freedom, since a "t" of 2.04 is required for significance.

TABLE 3

DISTRIBUTION OF THE INITIAL READING READINESS SCORES MADE ON THE
METROPOLITAN READING READINESS TEST AND TEST SCORES RELATED
TO THE KUHLMANN-ANDERSON TEST OF SIXTEEN ABOVE AVERAGE PUPILS

I.Q.	Reading Readiness	X^2	Y^2	XY
119	61	14161	3721	7259
119	60	14161	3600	7140
109	59	11881	3481	6521
108	58	11664	3364	6264
109	58	11881	3364	6322
99	58	9801	3364	5742
96	58	9216	3364	5568
105	57	11025	3249	5985
111	56	12321	3136	6216
96	56	9216	3136	5376
105	56	11025	3136	5880
109	56	11881	3136	6094
105	55	11025	3025	5775
97	54	9409	2916	5258
105	53	11025	2809	5565
99	53	9801	2809	5247
1691	912	179493	52074	96212
Mean		105.6	57.0	
S. E. M.		10.4	1.6	
S. D.		10.6	1.8	

TABLE 4

MEASURES OF DIFFERENCE BETWEEN THE ABOVE-AVERAGE AND BELOW-AVERAGE GROUPS IN INTELLIGENCE AS MEASURED BY THE KUHLMANN-ANDERSON TEST

Groups	Mean	S.D.	S.E.M.	$M_1 - M_2$	S.E. $M_1 - M_2$	"t"
Above-Average	105.6	2.8	1.41	16.04	.13	1.51*
Below-Average	89.56	1.8	.575			

*Significant value for "t": 2.04

Interpretation. --A summary of the data analyzed and compared above would appear to indicate that I.Q. scores were not significantly different, although the upper group was favored numerically.

Results on Measures of Physical Factors

The data on the Metropolitan Reading Readiness Test as related to the "E" and the Snellen Tests, also the Audiometer Test obtained by sixteen above-average pupils in the Southside Elementary School, Troy Alabama, 1965-1966, are presented Tables 5 and 6, pages 45 and 46, and are analyzed and interpreted in the following paragraphs.

Above-average pupils. -- The vision and hearing tests of the sixteen above-average pupils were administered by the teacher. Their eyes, ears, nose, throat, teeth, heart, lungs and the abdomen were examined by the school's physician. Three pupils had dental cavities. One pupil had enlarged tonsils. All sixteen pupils passed the vision and hearing tests. As a group, they were said to be in good health.

Lastly, and more significantly, in all probability it appeared that visual sensitivity includes not one but many functions. In administering this test, each child was given a sweep check at 20 decibels at frequencies of 250 - 4,000. Their responses were consistent. The sixteen above-average pupils appeared to have normal vision and hearing abilities.

Below-average pupils. -- The vision and hearing tests were administered by the teacher. The eyes, ears, nose, throat, teeth, heart, lungs and the abdomen were examined by the school's physician. Five pupils in this group had dental cavities. One failed the "E" and the Snellen Tests and two pupils failed the Audiometer Test. As a group, they were said to be in good health.

Lastly, and more significantly, in all probability it appeared that visual sensitivity includes not one but many functions. In administering this test, each child was given a sweep check at 20 decibels of frequencies of 250 - 4,000. Their responses were consistent.

The health records revealed from the medical examination that dental cavities were prevalent in both groups. Perhaps this can be attributed to poor nutrition.

Results on the Personal Adjustment Section of the California Test of Personality

The data on the personal adjustment indicies obtained by sixteen above-average and sixteen below-average first grade pupils in the Southside Elementary School, Troy, Alabama, 1965-1966, are presented in Tables 7 and 9, pages 47 and 50, and are analyzed and interpreted below.

TABLE 5

DISTRIBUTION OF THE METROPOLITAN READING READINESS TEST SCORES AS
RELATED TO VISION AND HEARING TESTS OF SIXTEEN FIRST GRADE PUPILS
IN THE SOUTHSIDE ELEMENTARY SCHOOL, TROY, ALABAMA, 1965-1966

Subjects	Scores	Above-Average Reading Status	"E" and Snellen	Audiometer
1	61	Superior	Passed	Passed
2	60	High Normal	Passed	Passed
3	60	High Normal	Passed	Passed
4	59	High Normal	Passed	Passed
5	58	High Normal	Passed	Passed
6	58	High Normal	Passed	Passed
7	58	High Normal	Passed	Passed
8	58	High Normal	Passed	Passed
9	57	High Normal	Passed	Passed
10	56	High Normal	Passed	Passed
11	56	High Normal	Passed	Passed
12	56	High Normal	Passed	Passed
13	55	Average	Passed	Passed
14	54	Average	Passed	Passed
15	53	Average	Passed	Passed
16	53	Average	Passed	Passed

TABLE 6

DISTRIBUTION OF METROPOLITAN READING READINESS TEST SCORES AS
 RELATED TO VISION AND HEARING TESTS OF SIXTEEN BELOW-AVERAGE
 FIRST GRADE PUPILS IN THE SOUTHSIDE ELEMENTARY SCHOOL,
 TROY, ALABAMA, 1965-1966

Subjects	Scores	Below-Average Reading Status	"E" and Snellen	Audiometer
1	46	Low Normal	Passed	Passed
2	46	Low Normal	Passed	Passed
3	46	Low Normal	Passed	Passed
4	45	Low Normal	Passed	Passed
5	45	Low Normal	Passed	Passed
6	44	Low Normal	Passed	Passed
7	44	Low Normal	Passed	Passed
8	43	Low Normal	Passed	Passed
9	42	Low Normal	Passed	Passed
10	40	Low Normal	Passed	Passed
11	32	Poor Risk	Passed	Passed
12	29	Poor Risk	Passed	Passed
13	27	Poor Risk	Passed	Passed
14	25	Poor Risk	Passed	Passed
15	19	Poor Risk	Passed	Failed
16	19	Poor Risk	Failed	Failed

TABLE 7

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN ABOVE-AVERAGE
FIRST GRADE PUPILS ON THE CALIFORNIA TEST OF PERSONALITY
(PERSONAL ADJUSTMENT) IN THE SOUTHSIDE ELEMENTARY SCHOOL,
TROY, ALABAMA, 1965-1966

Subjects	1A	P	1B	P	1C	P	1D	P	1E	P	1F	P	Total	P*	
1	6	60	7	80	7	70	6	50	7	80	6	60	39	70	AA*
2	5	40	4	20	5	40	6	50	3	20	6	60	29	30	I*
3	4	20	4	20	6	50	7	70	6	60	7	80	34	40	I*
4	7	80	6	50	6	50	6	50	6	60	8	90	39	70	AA*
5	4	20	5	30	6	50	6	50	7	80	6	60	34	40	I*
6	5	40	6	50	6	50	6	50	7	80	7	80	37	60	AA*
7	6	60	8	90	7	70	7	70	8	90	7	80	43	90	AA*
8	7	80	7	80	7	80	9	90	7	80	5	40	41	80	AA*
9	4	20	3	10	5	40	5	30	5	40	6	60	28	20	I*
10	5	40	3	10	6	50	7	70	6	60	6	60	33	40	I*
11	3	10	5	30	7	70	3	10	5	40	4	30	27	20	I*
12	5	40	5	30	4	20	5	30	6	60	4	30	29	30	I*
13	4	20	7	80	5	40	6	50	3	20	2	10	27	20	I*
14	7	80	6	50	6	50	6	50	6	60	8	90	39	70	AA*
15	5	40	6	50	6	50	6	50	7	80	7	80	37	60	AA*
16	5	40	3	10	6	50	7	70	6	60	6	60	33	40	I*

*P=percentile

*AA=above average

*I=inferior

TABLE 8

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN ABOVE-AVERAGE PUPILS ON
THE CALIFORNIA TEST OF PERSONALITY (PERSONAL ADJUSTMENT) AND
READING READINESS ON THE METROPOLITAN TEST

Personal Adjustment	Reading Readiness	x^2	y^2	XY
39	61	1521	3721	2179
29	60	841	3600	1740
34	60	1156	3600	2040
39	59	1521	3481	2301
34	58	1156	3364	1972
37	57	1359	3364	2164
43	58	1849	3364	2494
41	58	1681	3364	2378
28	57	784	3249	1596
33	56	1089	3136	1848
27	56	729	3136	2512
29	56	841	3136	1624
27	55	729	3025	1485
39	54	1521	2916	2106
37	53	1369	2809	1961
33	53	1089	2809	1749
549	912	19245	52074	32149

Above-average pupils. -- Of the sixteen above-average pupils, seven scored above the fiftieth percentile, and nine scored below the fiftieth percentile. None of these pupils scored above the seventieth percentile. The total scores ranged from 27 to 43. Six pupils' scores indicated that they were self-reliant; eight pupils' scores indicated that they had a normal sense of personal worth; thirteen pupils' scores indicated a feeling of belonging; twelve pupils' scores indicated freedom from withdrawing tendencies; and twelve pupils' scores indicated a normal sense of freedom from nervous symptoms.

Below-average pupils. -- Of the sixteen below-average pupils, two scored above the fiftieth percentile, and fourteen scored below the fiftieth percentile. None of these pupils scored above the seventieth percentile. The total scores ranged from 13 to 37. Seven pupils' scores indicated that they were self-reliant; eight pupils' scores indicated that they had a normal sense of personal worth; seven pupils' scores indicated that they had a feeling of belongingness; two pupils' scores indicated freedom from withdrawing tendencies; and two pupils' scores indicated freedom from nervous symptoms.

Summary. -- A summary of data in Tables 7-10 will permit several points to be made. None of the students in either the above-or below-average group scored above the seventieth percentile in personal adjustment. A higher percentage of the above-average group scored above the fiftieth percentile and a lower percentage fell below the fiftieth percentile when compared with the below-average group.

TABLE 9

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN BELOW-AVERAGE
FIRST GRADE PUPILS ON THE CALIFORNIA TEST OF PERSONALITY
(PERSONAL ADJUSTMENT) IN THE SOUTHSIDE ELEMENTARY SCHOOL,
TROY, ALABAMA, 1965-1966

Subjects	1A	P	1B	P	1C	P	1D	P	1E	P	1F	P	Total	P*	
1	7	80	7	80	5	40	4	20	2	10	3	20	28	10	I*
2	7	80	6	50	6	50	6	50	6	60	2	10	33	40	I*
3	6	60	8	90	8	90	4	20	4	30	7	80	37	60	AA*
4	4	20	6	50	5	40	6	50	1	1	4	30	26	20	I*
5	5	40	4	20	5	40	6	50	1	1	4	30	25	10	I*
6	5	40	5	40	8	90	8	90	4	30	7	80	37	60	AA*
7	7	80	5	30	3	10	3	10	1	11	4	30	23	10	I*
8	7	80	6	50	2	1	6	50	4	30	4	30	29	30	I*
9	6	60	6	30	7	70	5	30	2	10	4	30	29	30	I*
10	1	1	3	10	2	1	3	10	0	0	4	30	13	1	I*
11	5	40	5	30	8	90	6	50	3	20	3	20	30	30	I*
12	5	40	4	20	5	40	4	20	6	60	2	10	26	20	I*
13	3	10	2	2	4	20	4	20	1	1	3	20	17	2	I*
14	6	60	6	30	7	70	5	30	2	10	4	30	29	30	I*
15	4	20	6	50	5	40	6	50	1	1	4	30	25	10	I*
16	1	1	3	10	2	1	3	10	0	0	4	30	13	1	I*

*P=percentile

*I=inferior

*AA=above average

TABLE 10

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN BELOW-AVERAGE PUPILS ON
THE CALIFORNIA TEST OF PERSONALITY (PERSONAL ADJUSTMENT) AND
READING READINESS ON THE METROPOLITAN ACHIEVEMENT TEST

Personal Adjustment X	Reading Readiness Y	X^2	Y^2	XY
28	46	784	2116	1288
33	46	1089	2116	1518
37	46	1369	2116	1702
26	45	676	2025	1170
25	45	625	2025	1125
37	44	1369	1936	1628
23	44	529	1936	1012
29	43	841	1849	1247
29	42	841	1764	1211
13	40	169	1600	520
30	32	900	1024	960
26	29	676	844	754
17	27	289	729	459
29	25	841	625	725
25	23	625	529	575
13	19	169	361	247
420	596	11792	21595	16141

Results on the Social Adjustment Section
of the California Test of Personality

The data on the social adjustment indicies obtained by sixteen above- and sixteen below-average pupils in the Southside Elementary School, Troy, Alabama, 1965-1966, are presented in Tables 11-14, and are analyzed and interpreted below.

Above-average pupils. -- Of the sixteen above-average pupils, two were at the fiftieth percentile in social adjustment, eight scored above the 50 percentile and six scored below the 50 percentile. Four of the pupils in this group scored at the seventieth percentile and two at the nintieth percentile. The total scores ranged from 27 to 45. Nine pupils' scores indicated that they recognized desirable social standards. Eleven pupils' scores indicated that they were socially skillful; eight pupils' scores indicated that they were reasonably free from anti-social tendencies; twelve pupils' scores indicated that they exhibit desirable family relationships; thirteen pupils' scores indicated that they were satisfactorily adjusted to their school; and twelve of the pupils' scores indicated that they were making a good adjustment in their community.

In evaluating the scores for the group, the writer concluded that on the percentile scale ten pupils scored on or above the fiftieth percentile. The remaining pupils were rated as being inferior.

Below-average pupils. -- Of the sixteen below-average pupils, none scored above the fiftieth percentile; two scored at the fiftieth percentile and 14 scored below the fiftieth percentile. None of these

TABLE 11

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN ABOVE-AVERAGE
FIRST GRADE PUPILS ON THE CALIFORNIA TEST OF PERSONALITY
(SOCIAL ADJUSTMENT) IN THE SOUTHSIDE ELEMENTARY SCHOOL,
TROY, ALABAMA, 1965-1966

Subjects	2A	P	2B	P	2C	P	2D	P	2E	P	2F	P	Total	P*	
1	7	60	7	70	7	70	8	90	8	80	6	40	43	70	AA*
2	6	40	4	20	4	20	5	30	5	30	6	40	30	20	I*
3	7	60	7	70	8	90	8	88	7	60	7	60	45	90	AA*
4	8	80	8	90	5	30	7	80	6	40	7	60	41	60	AA*
5	8	80	8	90	6	50	7	80	7	60	7	60	43	70	AA*
6	8	80	8	90	7	70	6	50	8	80	6	40	43	70	AA*
7	7	60	8	70	7	70	8	90	7	60	7	60	43	70	AA*
8	8	80	7	70	5	30	6	50	7	60	7	60	40	60	AA*
9	5	30	7	70	6	50	6	50	6	40	4	20	34	30	I*
10	6	40	7	70	5	30	7	80	7	60	6	40	38	50	A*
11	4	20	4	20	4	20	5	30	6	40	6	40	29	20	I*
12	6	40	4	20	5	30	5	30	4	20	3	10	27	10	I*
13	6	40	6	50	5	30	4	20	5	30	3	30	31	20	I*
14	7	60	7	70	8	90	8	88	7	60	7	60	45	90	AA*
15	5	30	7	70	6	50	6	50	6	40	4	20	34	30	I*
16	6	40	7	70	5	30	7	80	7	60	6	40	38	50	A*

*P=percentile

*AA=above average

*I=inferior

*A=average

TABLE 12

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN ABOVE-AVERAGE PUPILS ON
THE CALIFORNIA TEST OF PERSONALITY (SOCIAL ADJUSTMENT) AND
READING READINESS ON THE METROPOLITAN ACHIEVEMENT TEST

Social Adjustment	Reading Readiness	x^2	y^2	XY
43	61	1849	3721	2623
30	60	900	3600	1800
45	60	2025	3600	2700
41	59	1681	3481	2419
43	58	1849	3364	2494
43	58	1849	3364	2494
43	58	1849	3364	2494
40	58	1600	3364	2320
34	57	1156	3249	1938
38	56	1444	3136	2128
29	56	841	3136	1624
27	56	729	3136	1512
31	55	961	3025	1705
45	54	2025	2916	2430
34	53	1156	2809	1802
38	53	1444	2809	2014
604	912	23358	52074	34497

TABLE 13

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN BELOW-AVERAGE
FIRST GRADE PUPILS ON THE CALIFORNIA TEST OF PERSONALITY
(SOCIAL ADJUSTMENT) IN THE SOUTHSIDE ELEMENTARY SCHOOL,
TROY, ALABAMA, 1965-1966

Subjects	2A	P	2B	P	2C	P	2D	P	2E	P	2F	P	Total	P*	
1	7	60	6	50	1	1	7	80	6	40	6	40	33	30	I*
2	7	60	7	70	4	20	6	50	6	40	6	40	36	40	I*
3	6	40	6	50	5	30	6	50	7	60	8	90	38	50	A*
4	7	60	6	50	5	30	5	30	7	60	5	30	35	40	I*
5	5	30	4	20	3	10	2	2	5	30	4	20	23	5	I*
6	6	40	5	30	6	50	5	30	6	40	4	20	30	20	I*
7	4	20	5	30	3	10	3	10	6	40	4	20	27	10	I*
8	8	80	8	90	6	50	4	20	8	80	4	20	38	50	A*
9	7	60	5	30	4	20	4	20	5	30	4	20	29	20	I*
10	6	40	3	10	1	1	4	20	4	20	4	20	22	5	I*
11	5	30	7	70	6	50	5	30	6	40	4	20	33	30	I*
12	4	20	4	20	0	0	3	10	5	30	5	30	21	5	I*
13	4	20	5	30	0	0	0	0	4	20	4	20	17	2	I*
14	5	30	4	20	3	10	2	2	5	30	4	20	23	5	I*
15	4	20	5	30	3	10	3	10	6	40	4	20	27	10	I*
16	5	30	4	20	3	10	2	2	5	30	4	20	23	5	I*

*P=percentile

*I=inferior

*A=average

TABLE 14

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN BELOW-AVERAGE PUPILS ON
THE CALIFORNIA TEST OF PERSONALITY (SOCIAL ADJUSTMENT) AND
READING READINESS ON THE METROPOLITAN ACHIEVEMENT TEST

Social Adjustment	Reading Readiness	x^2	y^2	XY
33	46	1089	2116	1518
36	46	1296	2116	1656
38	46	1444	2116	1748
35	45	1225	2025	1575
23	45	529	2025	1035
30	44	900	1936	1320
27	44	729	1936	1188
38	43	1444	1849	1634
29	42	841	1764	1218
22	40	484	1600	880
33	32	1089	1024	1024
21	29	441	841	609
17	27	289	729	459
23	25	529	625	575
27	23	729	529	621
23	19	529	361	437
455	596	13587	23592	17529

pupils scored above the seventieth percentile. The total scores ranged from 17 to 38. Eight pupils' scores indicated that they recognized desirable social standards; six of the pupils' scores indicated that they were socially skillful; three pupils' scores indicated that they were reasonably free from anti-social tendencies; three pupils' scores indicated that they exhibit desirable family relationships; nine pupils' scores indicated that they were satisfactorily adjusted to their school; three pupils' scores indicated that they were making good adjustment in their community.

Evaluating the scores for the group, it was indicated by the percentile scale that only two pupils scored at the fiftieth percentile. The other pupils were rated inferior in social adjustment.

Summary. -- From the data in Tables 11-14, it is clear that in terms of social adjustment more of the pupils in the below-average group fell below the fiftieth percentile than did those in the above-average group. A higher percentage of the latter group scored above the fiftieth percentile. None of the below-average pupils scored above the fiftieth percentile. Two of the above-average pupils scored at the nintieth percentile.

Results on Total California Test of Personality

The data on the total adjustment indicies obtained by sixteen above- and sixteen below-average pupils in the Southside Elementary School, Troy, Alabama, 1965-1966, are presented in Tables 15-17, pages 58-60, and are interpreted and summarized below.

TABLE 15

DISTRIBUTION OF METROPOLITAN READING READINESS TEST SCORES AS RELATED TO TOTAL ADJUSTMENT FACTORS
- OF THIRTY-TWO FIRST GRADE PUPILS IN THE SOUTHSIDE ELEMENTARY SCHOOL, TROY, ALABAMA, 1965-1966

Subjects	Above-Average Pupils			Total Adjustment Scores	Subjects	Below-Average Pupils			Total Adjustment Scores
	Scores	Reading Status				Scores	Reading Status		
1	61	Superior		82	1	46	Low Normal		61
2	60	High Normal		59	2	46	Low Normal		69
3	60	High Normal		79	3	46	Low Normal		75
4	59	High Normal		80	4	45	Low Normal		61
5	58	High Normal		77	5	45	Low Normal		48
6	58	High Normal		80	6	44	Low Normal		67
7	58	High Normal		86	7	44	Low Normal		50
8	58	High Normal		81	8	43	Low Normal		67
9	57	High Normal		82	9	42	Low Normal		58
10	56	High Normal		71	10	40	Low Normal		35
11	56	High Normal		56	11	32	Poor Risk		63
12	56	High Normal		56	12	29	Poor Risk		47
13	55	Average		60	13	27	Poor Risk		34
14	54	Average		72	14	25	Poor Risk		52
15	53	Average		73	15	23	Poor Risk		52
16	53	Average		75	16	19	Poor Risk		36
Mean		72.93					54.67		
S.E.		.25					.25		
r		.39					.30		
z		1.56					1.20		

TABLE 16

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN ABOVE-AVERAGE PUPILS ON
THE CALIFORNIA TEST OF PERSONALITY (TOTAL ADJUSTMENT) AND
READING READINESS ON THE METROPOLITAN ACHIEVEMENT TEST

Total Adjustment	Reading Readiness	X^2	Y^2	XY
82	61	6724	3721	5002
59	60	3481	3600	3540
79	60	6241	3481	4661
80	59	6400	3481	4680
77	58	5929	3364	4466
80	58	6400	3364	4640
86	58	7396	3364	4988
81	58	6561	3249	4617
82	57	6724	3136	4592
71	56	5041	3136	3976
56	56	3136	3136	3696
56	56	3136	3136	3696
60	55	3600	3025	3300
72	54	5184	2916	3888
73	53	5329	2809	3869
75	53	5625	2809	3975
169	912	86907	52074	67586

TABLE 17

DISTRIBUTION OF SCORES OBTAINED BY SIXTEEN BELOW-AVERAGE PUPILS ON
THE CALIFORNIA TEST OF PERSONALITY (TOTAL ADJUSTMENT) AND
READING READINESS ON THE METROPOLITAN ACHIEVEMENT TEST

Total Adjustment	Reading Readiness	X^2	Y^2	XY
61	46	3721	2116	2686
69	46	4761	2116	3184
75	46	5625	2116	3450
61	45	3721	2025	2745
48	45	2304	2025	2160
67	44	4489	1936	2948
50	44	2500	1936	2200
67	43	4489	1849	2881
58	42	3364	1764	2436
35	40	1225	1600	1400
63	32	3969	1024	2016
47	29	2209	841	1363
34	27	1156	729	818
52	25	2704	625	1300
52	23	2704	529	1196
36	19	1296	361	684
875	596	50237	23692	33467

Interpretation. -- From the data in Tables 15-17, a summary of the total adjustment factors as related to the Metropolitan Reading Readiness Test status of sixteen above- and sixteen below-average first grade pupils respectively was an indication that each of the two groups was markedly retarded in the development in its total personality adjustment patterns as measured by the California Test of Personality.

Results Obtained from Study of
Socio-Economic Factors

The data on the socio-economic factors obtained by sixteen above-average first grade pupils in the Southside Elementary School, Troy, Alabama, 1965-1966, as related to the Metropolitan Reading Readiness Test scores are presented in Table 18, page 62, are analyzed and interpreted below in the following paragraphs.

Above-average pupils. -- Of the sixteen above-average pupils, there were eleven working fathers; five were not working; three of the five not working fathers were on welfare. There were six working mothers; seven were not working; and three mothers were on welfare.

Two parents had attended college; twenty-one had attended high school and nine had attended elementary school. There were four parents who owned their homes.

It appeared that there were only two parents whose attitudes toward reading were indifferent; there were fourteen with acceptable attitudes.

TABLE 18

DISTRIBUTION OF METROPOLITAN READING READINESS TEST SCORES AS
RELATED TO SOCIO-ECONOMIC FACTORS OF SIXTEEN FIRST
GRADE PUPILS IN THE SOUTHSIDE ELEMENTARY SCHOOL,
TROY, ALABAMA, 1965-1966

Subjects	Scores	Reading Status	Working Parents		Socio-Economic Status Education			Home Ownership	Parent Attitude Toward Child's Reading	
			M*	F*	Elem.	High	College			
1	60	S*	No	Yes	A*	0	2	0	Yes	Acceptable
2	60	HN*	No	Yes	A*	0	1	1	Yes	Acceptable
3	60	HN*	No	Yes	A*	0	2	0	No	Acceptable
4	59	HN*	No	Yes	A*	1	1	0	No	Acceptable
5	58	HN*	Yes	No	A*	1	1	0	No	Acceptable
6	58	HN*	No	Yes	A*	0	1	1	Yes	Acceptable
7	58	HN*	No	No	BA*	1	1	0	No	Acceptable
8	58	HN*	Yes	Yes	A*	0	2	0	Yes	Acceptable
9	57	HN*	Yes	Yes	A*	0	2	0	No	Acceptable
10	56	HN*	No	Yes	A*	1	1	0	No	Acceptable
11	56	HN*	Yes	Yes	A*	0	2	0	No	Acceptable
12	56	HN*	No	Yes	A*	0	2	0	No	Acceptable
13	55	A*	Yes	No	BA*	2	0	0	No	Acceptable
14	54	A*	Yes	No	BA*	1	1	0	No	Indifferent
15	53	A*	No	Yes	A*	1	1	0	No	Acceptable
16	53	A*	No	No	BA*	1	1	0	No	Acceptable

*S = Superior

*M = Mother

*F = Father

*HN = High Normal

*A = Average

*BA = Below Average

The results from the questionnaires indicated that in all probability, it appeared that the cultural levels of these pupils' homes were the most important determiness of the adequacy of their background of knowledge and experiences.

Below-average pupils. -- The data on the socio-economic factors obtained by sixteen below-average first grade pupils in the Southside Elementary School, Troy, Alabama, 1965-1966, as related to the Metropolitan Reading Readiness Test scores are presented in Table 19, page 64, and are analyzed and interpreted in the following paragraphs.

There were nine working fathers; six were not working; three of the seven were on welfare. There were eight working mothers; three were on welfare, and five who were not working.

None of the parents in this group had attended college; eight had attended high school, and twenty-four had attended elementary school. There were three parents who owned their homes; seven parents showed acceptable attitudes toward reading, and nine were indifferent toward reading.

Evaluation of the results from the questionnaires indicated that in all probability it appeared that the cultural levels of these pupils' homes were the most important determiness of the adequacy of their background of knowledge and experiences.

TABLE 19

DISTRIBUTION OF METROPOLITAN READING READINESS TEST SCORES AS
RELATED TO SOCIO-ECONOMIC FACTORS OF SIXTEEN FIRST
GRADE PUPILS IN THE SOUTHSIDE ELEMENTARY SCHOOL,
TROY, ALABAMA, 1965-1966

Subjects	Scores	Reading Status	Working Parents			Socio-Economic Status			Home Ownership	Parent Attitude Toward Child's Reading
			M*	F*	BA*	Elem.	High	College		
1	46	LN*	Yes	Yes	BA*	2	0	0	No	Acceptable
2	46	LN*	Yes	No	BA*	1	1	0	No	Indifferent
3	46	LN*	Yes	Yes	A*	2	0	0	Yes	Acceptable
4	45	LN*	No	Yes	BA*	2	0	0	No	Indifferent
5	45	LN*	No	Yes	A*	2	0	0	No	Acceptable
6	44	LN*	No	Yes	A*	2	0	0	Yes	Acceptable
7	44	LN*	No	No	BA*	2	0	0	No	Indifferent
8	43	LN*	No	Yes	BA*	2	0	0	No	Acceptable
9	42	LN*	Yes	Yes	A*	1	1	0	Yes	Acceptable
10	40	LN*	Yes	No	BA*	1	1	0	No	Indifferent
11	32	PR*	No	Yes	BA*	0	2	0	No	Acceptable
12	29	PR*	No	No	BA*	1	1	0	No	Indifferent
13	27	PR*	Yes	No	BA*	1	1	0	No	Indifferent
14	25	PR*	No	Yes	BA*	1	1	0	No	Indifferent
15	23	PR*	Yes	No	BA*	2	0	0	No	Indifferent
16	19	PR*	Yes	No	BA*	2	0	0	No	Indifferent

*LN = Low Normal

*PR = Poor Risk

*M = Mother

*BA = Below Average

*F = Father

*A = Average

Relationships and Respective Comparisons of Certain
Factors to the Reading Readiness Abilities of
the Above-Average and Below-Average Groups

Introductory statement. -- The preceding section of this chapter has dealt mainly with the presentation of status of the above-average and below-average groups in reading readiness, intelligence, personality adjustment, certain physical factors, and socio-economic status. This section fulfills a major aim of the study, namely, the relating of these factors to reading readiness in order to compare the extent to which they might have contributed to the above-average and below-average status of the pupils once they had begun reading. The sections which follow present this information, either through statistical computations or systematic observation. The latter procedures became necessary when the results could not be easily handled on a purely quantitative basis.

Relationships and respective comparisons of intelligence and reading readiness. -- Table 20 presents the results of correlation intelligence and reading readiness test performances of the two groups. For the above-average group the value of "r" was .39 and for the below-average group it was .26. In terms of the Table of Values of "r" at the .05 level of confidence, with 30 degrees of freedom, the first value was significant, in that an "r" of .349 is required, but obviously this was not true with the below-average group. In both instances, however, it could be said that relationship was "slightly existent" for the above-average group, but negligible for the below-average group. When these "r's" were converted to "z's" it was noted that

TABLE 20

A COMPARISON OF RELATIONSHIPS BETWEEN READING READINESS AND THE
TESTED MEASURES OF INTELLIGENCE AND ADJUSTMENT OF THIRTY-TWO
FIRST GRADE PUPILS IN THE SOUTHSIDE ELEMENTARY SCHOOL,
TROY, ALABAMA, 1965-1966

Relationship	Correlation for Above-Average Group		Correlation for Below-Average Group		Difference Between	
	"r"	"z"	"r"	"z"	"z's"	"t"
Intelligence and Reading Readiness	.39	.41	.26	.27	.14	1.13
Personal Adjustment and Reading Readiness	.69	.85	.72	.91	.06	.48
Social Adjustment and Reading Readiness	.49	.54	.14	0	0	0
Total Adjustment and Reading Readiness	.76	1.00	.60	.69	.31	2.50*

*Significant at the .05 level of confidence: 2.04

there was not a significant difference between the correlations. In this measuring and comparing of relationships, however, it was concluded by this writer that for the above-average group, there was a slight tendency for intelligence to influence readiness for reading, and hence, there was the possibility that possession of certain factors inherent in the intelligence measure might have been responsible for higher performances in reading. On the other hand, no such claims could be assumed regarding the below-average group.

Relationships and respective comparisons of adjustment and reading readiness. -- Table 20 carries the data pertaining to correlations of these two variables. There, it may be noted that personal adjustment is considered from the standpoints of total adjustment, personal adjustment and social adjustment. First of all, the above-average group had an "r" of .76 between reading readiness and total adjustment, while the below-average group had an "r" of .60 between these variables. In both instances the readiness status of the two groups could be said to have reflected significant relationships between readiness and total personal adjustment, for these values are appreciably higher than the "r" of .349 required for significance at the .05 level of confidence, with 30 degrees of freedom. When correlations were converted to "z" scores and comparisons were made, it was found that there was a significant difference between the correlations. The ratio of 2.50 was larger than the value of 2.04 required for significance at the 5 percent level of confidence.

Secondly, the relationship between reading readiness and personal adjustment was determined. As is shown in Table 20, the correlations were again relatively "high." For the above-average group the coefficient was .69, and for the below-average group, it was .72. Again, it was assumed that the two variables were related in both instances, for the values were far above the "r" .349 required for significance at the .5 percent level of confidence. When these correlations were converted to "z" scores and the difference computed, there was no significance.

Thirdly, the relationship between reading readiness and social adjustment was determined. Unlike the preceding values the relationships differed appreciably. For the above-average group the coefficient was .49 and for the below-average group it was .14. Obviously, these values indicated what might be "fair" relationship between reading readiness and social adjustment for the above-average group and none for the below-average group. Comparison could be made by inspection, and it seemed justifiable to conclude that the groups differed significantly in this area and that a favorable relationship between the factors might have contributed to the higher reading status of the upper group.

In all probability social adjustment factors cannot be separated from the initial reading readiness status obtained by the two groups on the Metropolitan Reading Readiness Test.

Finally, and more significantly, there is the question as to what extent the social patterns and the opportunity and encouragement

for participation in all types of person-to-person and group relationships in the home and community of these pupils provided an environment conducive to the personality growth and development of the first grade pupils in the Southside Elementary School, Troy, Alabama.

General conclusions drawn regarding relationships which were determined by systematic observations. -- The first area for such consideration is the relationship between visual and readiness factors. Table 5, page 45, presents data basic to this discussion. The second, presented in the same table, is between hearing and reading readiness. In both observations it was noted that all pupils passed on both the tests administered. It was concluded, therefore, that since these satisfactory ratings persisted for both groups, there had been no definite relationships between these physical factors and success or failures on tests of reading readiness and reading achievement. The writer would make the observation, however, that the test used for vision gave no real insight into how well the pupils functioned on materials at reading distance. This, then, becomes a limitation in the determining of true relationship between reading readiness and visual efficiency.

With regard to socio-economic status it was concluded that there were reasons to believe that this factor contributed to the levels of reading achievement, but, again these generalizations are based on systematic observation of data summarized in Tables 12 and 13. From compilation of information and analysis of questionnaires

and interviews, it seemed to be reasonable to make the specific summaries which follow regarding upper and lower reading level groups, respectively.

A summary of the relationship of the initial reading readiness abilities as related to the socio-economic status would indicate that neither can be separated. The home experiences of the pupils are especially important in the reading readiness program. The above-average pupils were observed to come from homes where books, magazines and newspapers were plentiful, where parents read to the pupils, and used good English daily, and required them to use good English.

A summary of the relationship of the initial reading readiness abilities as related to the socio-economic status indicated that pre-existing conditions in the home were the dominant factors among many of these pupils.

The home experiences of the pupils were especially important in the reading readiness program. The below-average pupils were observed to come from homes where there were few books, magazines, and newspapers. Communication between parent and child might have been lacking. Unhappy experiences in the home might, in all probability, have resulted in their emotional and social maladjustment as indicated by the California Test of Personality.

Emotional maturity, according to the research findings, is most likely to be developed by loving care along with a democratic approach, which takes into account all members of the family. Parental

patterns which research reveals to be conducive to a child's academic success include giving the child freedom within consistent limits to explore and experiment, much verbal communication, and emphasis on both speaking and listening. Each of these factors appeared to be a need in the above- and below-average groups in this study.

Interpretive summary with regard to relationships and respective comparisons. -- The relationships may be summarized according to above-average and below-average groups in the following manner.

For the below-average-in-reading group:

1. There was no appreciable relationship between reading readiness and intelligence.
2. There were no relationships drawn between reading readiness and the factors of visual and auditory acuity. All subjects were at a satisfactory level of efficiency and, hence, benefitted from whatever values accrued from such satisfactory conditions.
3. There was no relationship found between reading readiness and social adjustment.
4. There were relatively high relationships between reading readiness and personal and total adjustment.
5. There seemed to be a trend toward a kind of positive relationship between socio-economic status and reading readiness which reflected that those pupils who were limited in readiness factors tended to be low in socio-economic conditions.

For the above-average group:

1. There was slight relationship between intelligence and reading readiness.
2. There was high relationship between reading readiness and total adjustment as well as personal adjustment.

3. There was a fair relationship between social adjustment and reading readiness.
4. Since all pupils passed in tests of auditory and visual acuity, it was assumed that all subjects profited from this favorable physical status and could benefit from whatever reading skills are facilitated through these areas.
5. There seemed to be a tendency for any advantage in socio-economic status to rest with the above-average group.

In comparison of relationships:

1. In only one relationship of a statistical nature could it be said that the correlations of the "x" respective groups were significantly different, and this was between reading readiness and total adjustment. Both groups revealed an appreciable relationship between the two variables, but the above-average group held a favorable ascendance in this area.
2. All other relationships were not significantly different and indicated that although the two groups differed in range of reading abilities, the trend in respective variables tended to be similar.
3. The latter seemed to obtain, also, in the relationships between reading readiness and socio-economic status of the above- and below-average readers.

In general, then, this writer concluded that all of the factors studied made some contribution to readiness for reading, whether in terms of their lack or presence. This is particularly true, for example, of reading readiness and social adjustment. In this area the above-average group seemed to be significantly favored and the below-average group just the opposite. It is highly probable that this factor could have been definitely inoperative in the below-average group and thus representative of a real need, particularly in situations where reading is taught on a group rather than an individualized basis. Similarly,

seeming lacks in socio-economic status seemed to accompany limitations in reading achievement.

Other implications will be drawn in the latter sections of the chapter which follows.

CHAPTER III

SUMMARY OF BASIC FRAMEWORK OF THE STUDY, FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary and Research Design of the Study

Success in school depends upon a child's being able to read. Teaching a child to read is the most important contribution to his development that the teacher can make. It is, therefore, the desire of all teachers to create a classroom environment rich in experiences which will contribute to effective learning. In initiating a reading program with any group or groups, it is essential to ascertain the reading status of the students involved. In this way the first grade teacher will be able to determine the reading ability of each child. Hence, any studies on a comparison of relationships of certain factors to the initial reading readiness abilities of two groups of first grade pupils would represent a contribution to instructional procedures.

The writer sought, therefore, to conduct such a study and to provide firsthand data about factors important to growth in reading such as (1) mental, (2) physical, (3) personal, and social adjustment and socio-economic which might be used as an appraisal in aiding the teacher to see the interrelationship of these factors and their significance in child growth.

The problem involved in this study was to compare the extent to which intellectual, physical, personal and social adjustment and socio-economic factors related to the initial reading readiness abili-

ties of two groups of first grade pupils with above-average and below-average academic performances, respectively, at the end of the school year 1965-1966.

The major purpose of this study was to ascertain the relationships of certain factors to the initial reading readiness abilities of two groups of first grade pupils.

More specifically, the purposes of this research, with reference to the sixteen above-average and sixteen below-average first grade pupils of Southside Elementary School, Troy, Alabama, were to determine:

1. The general reading status of these two groups and differences, if any, which might exist.
2. The extent which intellectual factors relate to initial reading readiness abilities of above- and below-average pupils.
3. The extent which physical factors relate to the initial reading readiness abilities of above- and below-average pupils.
4. The extent adjustment factors relate to initial reading readiness abilities of above- and below-average pupils.
5. The extent socio-economic factors relate to initial reading readiness abilities of above- and below-average pupils.
6. The findings, implications and recommendations derived from an analysis and interpretation of the data which may be useful and helpful to pupils in an initial reading readiness program.

The subsequent terms in this study carried these described meanings:

1. The term, "intellectual factors," refers to the group behavioral consistency of pupils.

2. The term, "physical factors," refers to good general health, visual and auditory efficiency.
3. The term, "reading readiness," refers to the developmental stage at which constitutional and environmental factors have prepared the child for reading instruction as measured by the Metropolitan Reading Readiness Test.
4. The term, "personal and social adjustment factors," refers to the intangible elements of the total complex patterns of feeling, thinking and acting, as measured by the California Test of Personality.
5. The term, "socio-economic factors," refers to the background of parents and siblings, economic status, home atmosphere, and achievement of the individual or group.
6. The term, "above-average," refers to those pupils who fall above the means of a distribution of scores derived from averaging of pupils' performances on the Metropolitan Achievement Tests.
7. The term, "below-average," refers to those pupils who fall below the "means" of a distribution of scores derived from an averaging of the pupils' respective performances on the Metropolitan Achievement Tests.

Unfortunately, this study was limited to two groups of first grade pupils in the Southside Elementary School, Troy, Alabama, 1965-1966. Further, the major limitation to this research inheres in the fact that in an effort to determine the extent that intellectual, physical, personal, social adjustment and socio-economic factors influence or contribute to reading readiness abilities, no attempt was made to establish the socio-economic status, but rather to point out some of the factors that are involved in the reading readiness process.

Further details of the basic design are enumerated below:

1. The locale and period of study. --This study was conducted at Southside Elementary School, Troy, Alabama, during the school year, 1965-1966.

2. Method of research. -- The Descriptive survey method of research, employing the specific techniques of Standardized Tests, Questionnaires and School Records was used to gather the necessary data for the completion of this study.
3. Subjects and materials. -- The subjects and materials (instruments) used in this study were characterized under the separate captions below:

A. Instruments - The instruments were:

- (1) Metropolitan Reading Readiness Tests - Forms "R" and "S"
- (2) California Test of Personality
- (3) Kuhlmann-Anderson Intelligence Test
- (4) Questionnaires
- (5) Audiometer Test
- (6) "E" and Snellen Tests

B. Subjects - The subjects involved in this study were thirty-two first grade pupils of the Southside Elementary School in Troy, Alabama.

4. Criterion of Reliability. -- The "criterion of reliability" for the significance of difference was established as Fisher's "t" of 2.04 at the .05 level of confidence, with 30 degrees of freedom, together with the test forms.

Procedural steps. -- The procedural steps used in this study

were the following:

- (a) Permission to conduct this study was secured from the proper persons in authority.
- (b) A further study of related literature was reviewed, summarized and presented in the finished thesis copy.
- (c) School cumulative records were examined for the purpose of securing pertinent information relative to such factors as health, previous achievement (kindergarten) and background information.
- (d) Questionnaires were sent to parents. General information was obtained concerning the socio-economic status of the family, education, travel, reading materials, social adjustment and emotional stability.

- (e) The Snellen and "E" Charts were used to test the vision of the pupils.
- (f) The Metropolitan Reading Readiness Test and the Kuhlmann-Anderson Intelligence Test were administered to all pupils.
- (g) Data derived from the tests and questionnaires were tabulated in appropriate tables and treated by comparing the relationships of certain factors as indicated by the purposes of the research.
- (h) The statements of conclusions, implications and recommendations derived from the comparison and interpretation of the data were taken and formulated in the finished thesis copy.

Summary of the Review of Related Literature

The many studies reviewed have attempted to enumerate the various capacities and functions upon which learning to read depends. The authorities agreed that a pupil's general intelligence, his linguistic aptitude, his vision and hearing, his general health and vigor, his emotional balance, and various other characteristics affect his ability to learn to read at every stage from the first lesson to adult life.

Authorities all agreed on the following:

1. That there are certain factors which influence reading readiness, such as intellectual, physical, personal and social adjustment, and socio-economic.
2. That teachers can determine when children are physically, mentally, emotionally and socially mature enough for beginning reading by using intelligence tests, reading and readiness tests and systematic observations.
3. That certain factors of personality are related to reading achievement. Personal factors can interfere with reading growth or the inability to succeed may cause dissatisfaction.

4. That social adjustment and socio-economic factors were found to be contributing factors in reading readiness abilities. Maladjusted homes, inter-family relationships and the social adjustment of the pupils may develop mental adjustment which may produce emotional resistance to learning to read.
5. The poor vision or hearing physical disabilities and unfavorable environmental conditions are also contributing factors in reading readiness abilities.
6. That some pupils may be under-achieving. That is, that they may not be achieving according to their intellectual potentialities. There appears to be a definite relationship between reading achievement and intelligence.
7. That pupils can achieve in reading, if given efficient and systematic instruction in a pleasant and secure environment at a level commensurate with their mental age. Reading achievement is closely related to intelligence. Correlations as high as from .50 to .80 have been found.

Summary of Data

The devices used in obtaining the necessary information in this study were Survey Tests, Questionnaires, School Records, Audiometer Test and Vision Tests.

The findings were as follows:

1. Analysis of the above-average group's performance on the Metropolitan Reading Readiness Test indicated a range of 9 with a low score of 53 and a high score of 61. The mean score was 57.0. The range indicated for the below-average group was 28, with a low score of 19 and a high score of 46. The mean score was 37.0. These findings indicated that there was a significant difference in the reading readiness abilities of the two groups.
2. The relationship between intelligence and reading readiness of the above-average pupils revealed that there was a slight positive relationship of .39 between reading

readiness and intelligence. The I.Q. scores of this group as obtained by the Kuhlmann-Anderson Intelligence Test ranged from a low of 99 to a high of 119 with a range of 21.

3. The correlation between intelligence and reading readiness among the below-average pupils revealed that there was no relationship between reading readiness and intelligence. The I.Q. scores of this group as obtained by the Kuhlmann-Anderson Intelligence Test ranged from a low of 72 to a high of 92 with a range of 21. The correlation of .22 was below the "r" of .349 required for significance at the .05 level of confidence.
4. The general health status of both groups was good, with the exception of numerous cavities in the teeth of both groups. One pupil failed the hearing test and passed the vision test in the below-average group. The above-average pupils passed both tests. Therefore, it appeared that in this study the achievement of both groups was not retarded by their general physical conditions, but rather facilitated.
5. Seven above-average pupils were above-average in personal adjustment. Two below-average pupils were above-average in personal adjustment.
6. Ten above-average pupils were adjusted socially. Two below-average pupils were well adjusted socially.
7. For the total adjustment, nine above-average pupils scored above the fiftieth percentile. Two below-average pupils scored at the fiftieth percentile.
8. Relationships between reading readiness and adjustment were:
 - a. For the above-average-in-reading group: personal adjustment and readiness, .69; social adjustment and readiness, .49; and total adjustment and readiness, .76.
 - b. For below-average: personal adjustment and readiness, .72; social adjustment and readiness, .14; and total adjustment and readiness, .60.

9. Cultural conditions in the home were related to reading development. The educational and professional status of the parents, the number of books owned by the students and families seemed to contribute greatly to the reading development of the above- and below-average pupils.

Conclusions

The analysis and interpretation of the data would appear to warrant the following conclusions:

1. Examination of the initial reading readiness status of the two groups indicated that the above-average pupils were reading at a stage comparable to the first grade level, while the below-average pupils needed to remain in the pre-reading stage longer.
2. Since there was a positive relationship between intelligence and reading readiness for the above-average group and none for the below-average group, it was concluded that the above-average pupils might have been achieving because of their intelligence levels, and that the below-average ones might be retarded and delayed because of certain limitations in potential and failure of readiness and intelligence to contribute to each other in a positive variation.
3. The findings of the relationship between reading readiness and intelligence led to the conclusion that when intellectual factors do relate to the reading readiness process they may in turn facilitate reading achievement.
4. Physical conditions seemed to follow no particular pattern in cases of above- or below-average pupils. The two physical factors did not appear to be present any marked differences in the reading readiness process. Most of the cases were satisfactory in vision and hearing.
5. More of the above-average pupils scored above average in personal adjustment than did the below-average group.
6. The above-average pupils had better social adjustment than did the below-average pupils, and a positive relationship indicated that this factor might have accounted for a measure of their superiority in reading.

7. The above-average group had higher total adjustment scores.
8. Favorable economic conditions and unfavorable home experiences of the pupils were especially important factors in the reading readiness process of the above- and below-average pupils and in all probability influenced reading achievement.

Implications

The followings are implications which have been based on the findings and conclusions of this study:

1. The fact that the above-average pupils indicated average achievements would seem to indicate a need for continued effort to help them improve and maintain their level of achievement and to motivate individual pupils who may show promise of attainment beyond their grade level.
2. The very low reading achievement of the below-average pupils may indicate a need for more enriched pre-reading program, also a need for finding the causative factors responsible for poor readers.
3. On the basis of the statistical findings it was implied that mental ability is an important factor in reading achievement or lack of it among the above- and below-average pupils.
4. Because the above- and below-average pupils had limitations of total adjustment factors, it would indicate that the personal and social adjustment factors needed to be improved.
5. There seemed to be a relationship between socio-economic level and reading readiness abilities of the above- and below-average pupils. Home environment appeared to be conducive to wholesome attitudes toward school.
6. Physical status seemed to have been a significant factor related to reading readiness abilities in both groups. It appeared that the physical status was not the one factor responsible for the low-normal reading status of the below-average pupils.

Recommendations

The findings of this study appeared to justify the recommendations that follow:

1. Much emphasis and stress should be centered on the need for better understanding of what reading readiness tests measure. It is apparent that there is a need for developing valid instruments which schools can use to evaluate the readiness levels that have been achieved by their pupils.
2. It is recommended that a special in-service program on reading readiness abilities be initiated at the beginning of the school year in all elementary schools.
3. It is recommended that there be more activities which would aid in the development of the pupils' personal, social and emotional adjustment.
4. A sound reading program should be established giving due consideration to school, community, and the general reading status of all pupils.

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Chapter, and Saint Paul of the Cross
Catholic Church

A P P E N D I X

Kuhlmann-Anderson Test

A

SEVENTH EDITION

NAME

GRADE Boy Girl

TEACHER

SCHOOL City

DATE TESTED
Year Month DayDATE OF BIRTH
Year Month DayAGE
Years Months Days

SCORE

1.

2.

3.

4.

5.

6.

7.

8.

T

Test
Results

CA Yrs.	Mos.*	Total Score	PR	Quotient	PR	MA† Yrs.	Mos.
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Test administered by

Test scored by

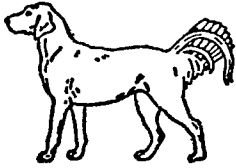
Comments:

* Add 1 month to CA for 16 days or more.

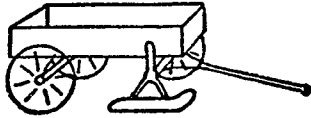
† Derive MA from CA and IQ, using IQ Calculator.

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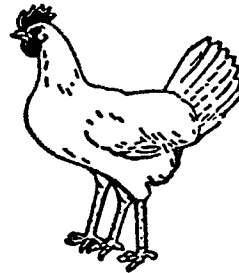
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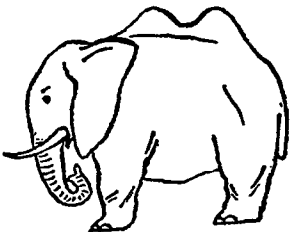
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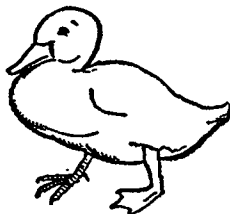
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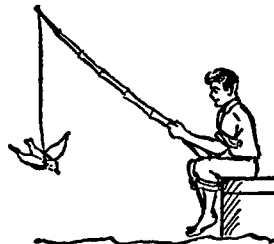
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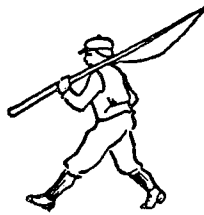
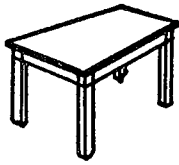


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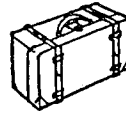
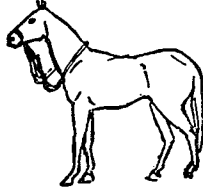


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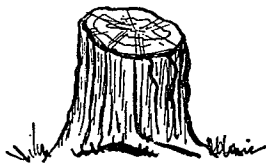
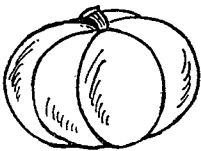
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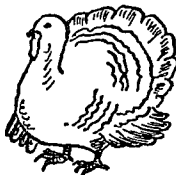
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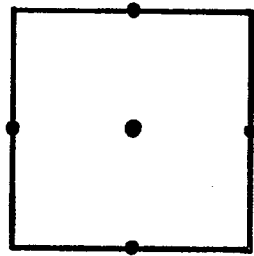
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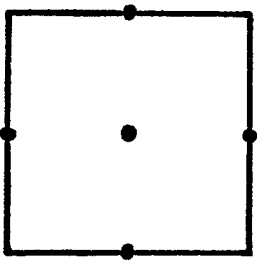
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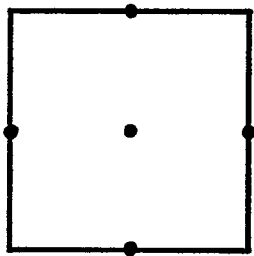
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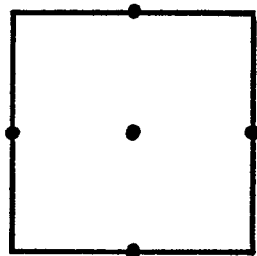
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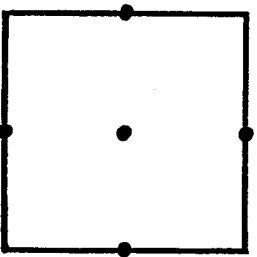
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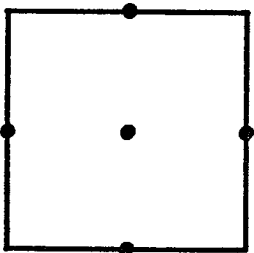
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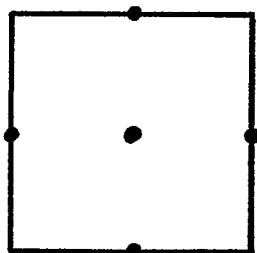
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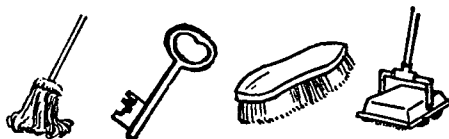
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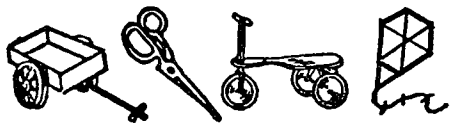
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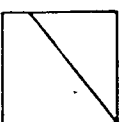
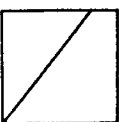
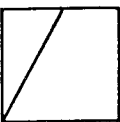
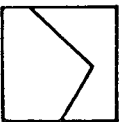
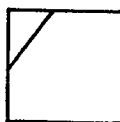







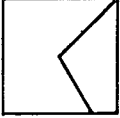
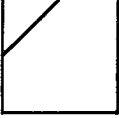
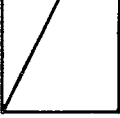
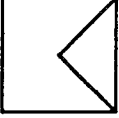
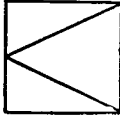







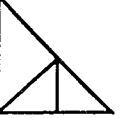
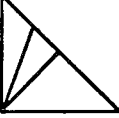
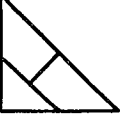
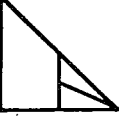
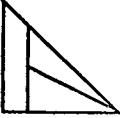

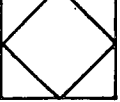
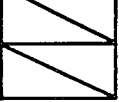

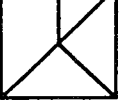


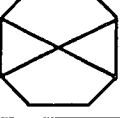
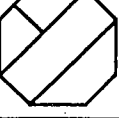
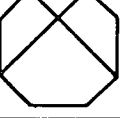
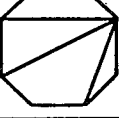









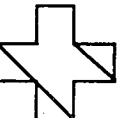
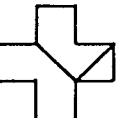

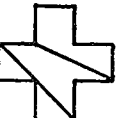












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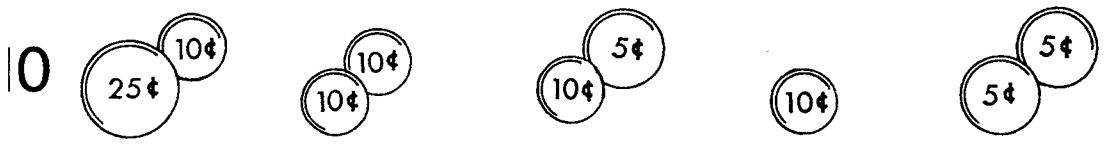
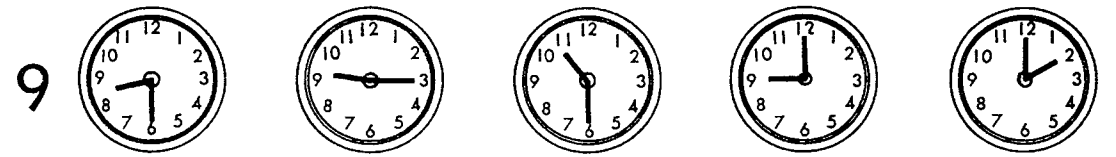
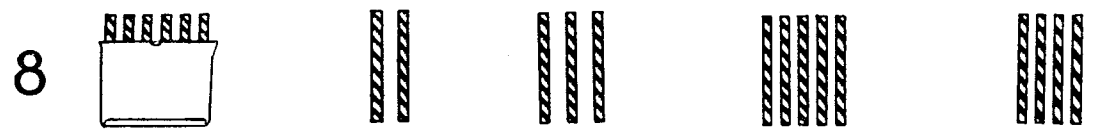
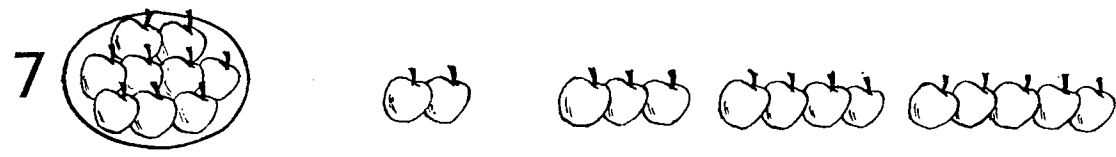
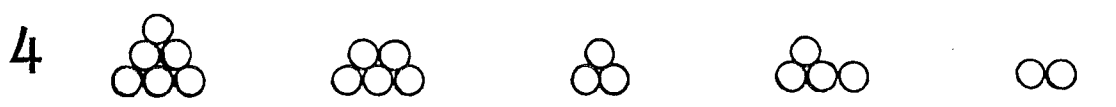
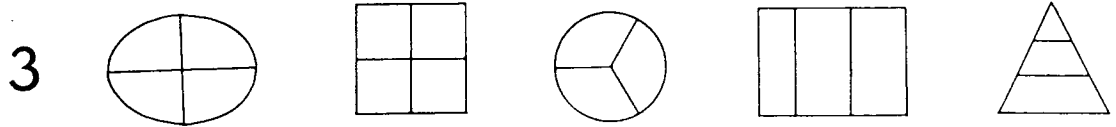
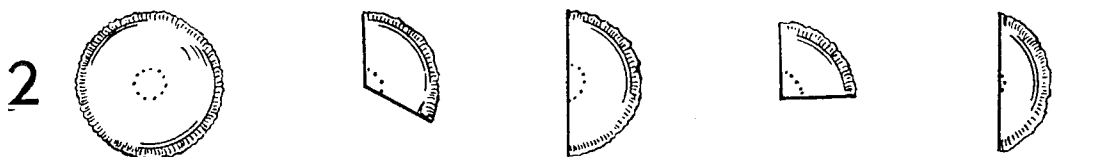
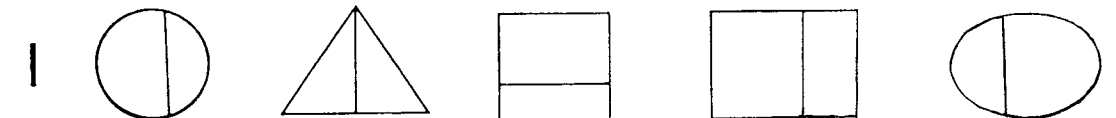
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Primary • GRADES
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California Test of Personality

1953 Revision

Devised by

LOUIS P. THORPE, WILLIS W. CLARK, AND ERNEST W. TIEGS



(CIRCLE ONE)
Name..... Grade..... Boy Girl
Last First Middle
School..... City..... Date of Test.....
Month Day Year
Examiner..... (.....) Pupil's Age..... Date of Birth.....
Month Day Year

TO BOYS AND GIRLS:

This booklet has some questions which can be answered YES or NO. Your answers will show what you usually think, how you usually feel, or what you usually do about things. Work as fast as you can without making mistakes.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.

SECTION 1 A

1. Is it easy for you to play by yourself when you have to? YES NO
2. Is it easy for you to talk to your class? YES NO
3. Do you feel like crying when you are hurt a little? YES NO
4. Do you feel bad when you are blamed for things? YES NO
5. Do you usually finish the games you start? YES NO
6. Does someone usually help you dress? YES NO
7. Can you get the children to bring back your things? YES NO
8. Do you need help to eat your meals? YES NO

Section 1 A
(number right)

SECTION 1 B

1. Do the children think you can do things well? YES NO
2. Do the other children often do nice things for you? YES NO
3. Do you have fewer friends than other children? YES NO
4. Do most of the boys and girls like you? YES NO
5. Do your folks think that you are bright? YES NO
6. Can you do things as well as other children? YES NO
7. Do people think that other children are better than you? YES NO
8. Are most of the children smarter than you? YES NO

Section 1 B
(number right)



SECTION 1 E

1. Do the boys and girls often try to cheat you? YES NO
2. Do you feel very bad when people talk about you? YES NO
3. Are most of the boys and girls mean to you? YES NO
4. Do you feel bad because people are mean to you? YES NO
5. Do many children say things that hurt your feelings? YES NO
6. Are many older people so mean that you hate them? YES NO
7. Do you often feel so bad that you do not know what to do? YES NO
8. Would you rather watch others play than play with them? YES NO

Section 1 E
(number right)

SECTION 1 F

1. Do you often wake up because of bad dreams? YES NO
2. Is it hard for you to go to sleep at night? YES NO
3. Do things often make you cry? YES NO
4. Do you catch colds easily? YES NO
5. Are you often tired even in the morning? YES NO
6. Are you sick much of the time? YES NO
7. Do your eyes hurt often? YES NO
8. Are you often mad at people without knowing why? YES NO

Section 1 F
(number right)

SECTION 2 C

1. Do people often make you very angry? YES NO
2. Do you have to make a fuss to get people to treat you right? YES NO
3. Are people often so bad that you have to be mean to them? YES NO
4. Is someone at home so mean that you often get angry? YES NO
5. Do you have to watch many people so they won't hurt you? YES NO
6. Do the boys and girls often quarrel with you? YES NO
7. Do you like to push or scare other children? YES NO
8. Do you often tell the other children that you won't do what they ask? YES NO

Section 2 C
(number right)

SECTION 2 D

1. Are your folks right when they make you mind? YES NO
2. Do you wish you could live in some other home? YES NO
3. Are the folks at home always good to you? YES NO
4. Is it hard to talk things over with your folks because they don't understand? YES NO
5. Is there someone at home who does not like you? YES NO
6. Do your folks seem to think that you are nice to them? YES NO
7. Do you feel that no one at home loves you? YES NO
8. Do your folks seem to think that you are not very smart? YES NO

Section 2 D
(number right)

GO

RIGHT ON TO
THE NEXT PAGE

Metropolitan Readiness Tests

BY GERTRUDE H. HILDRETH, PH.D., AND NELLIE L. GRIFFITHS, M.A.

TEST : FORM R



NAME _____ BOY _____ GIRL _____ DATE OF TESTING _____ Year _____ Month _____ Day _____
 TEACHER _____ SCHOOL _____ DATE OF BIRTH _____ Year _____ Month _____ Day _____
 CITY _____ COUNTY _____ STATE _____ PUPIL'S AGE Yrs. _____ Mos. _____
 GRADE _____ NUMBER OF MONTHS KINDERGARTEN TRAINING _____

TEST	RAW SCORE
1. WORD MEANING	
2. SENTENCES	
3. INFORMATION	
4. MATCHING	
Total Tests 1-4	
5. NUMBERS	
6. COPYING	
Total Tests 1-6	

This space is to be used for drawing a man.

READING READINESS

SUM OF SCORES TESTS 1-4	LETTER RATING	READING READINESS STATUS

NUMBER READINESS

SCORE TEST 5	LETTER RATING	NUMBER READINESS STATUS

TOTAL READINESS

SUM OF SCORES TESTS 1-6	LETTER RATING	TOTAL READINESS STATUS	PERCENTILE RANK

DRAWING A MAN
TEST

RATING

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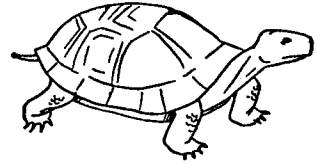
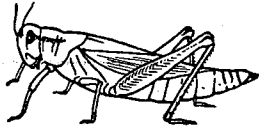
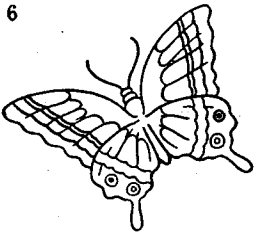
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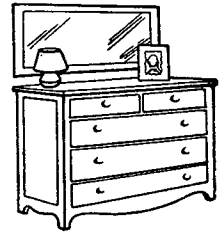
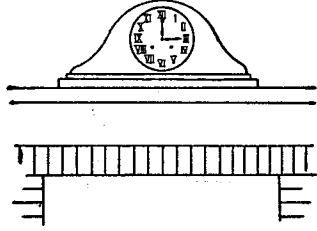
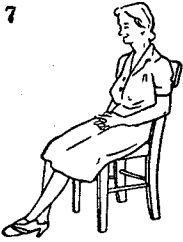
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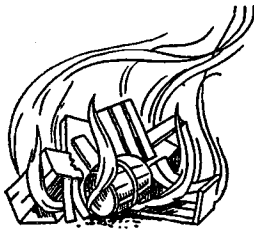
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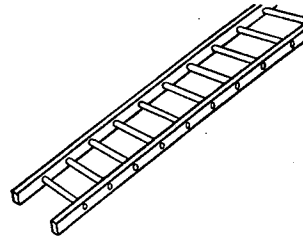
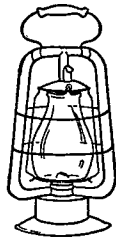
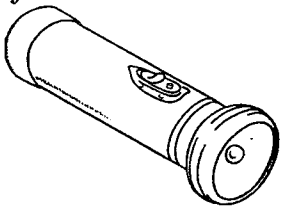
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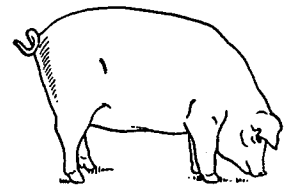
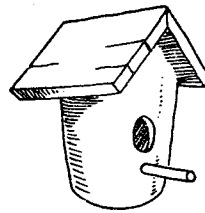
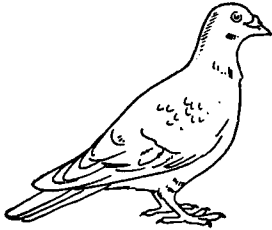
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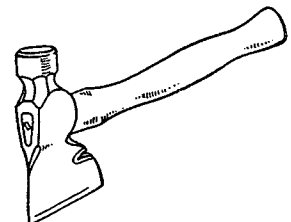
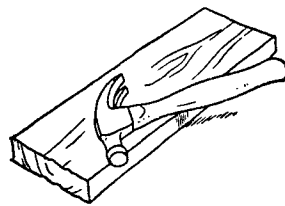
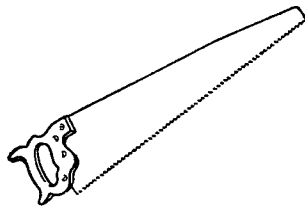
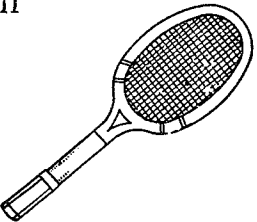
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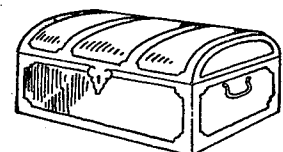
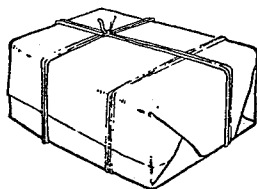
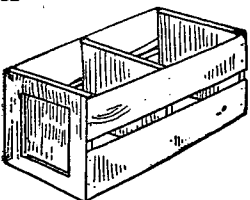
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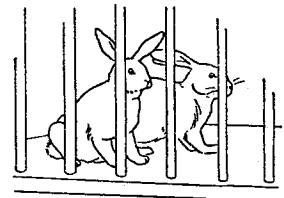
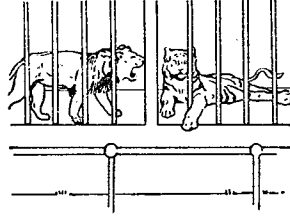
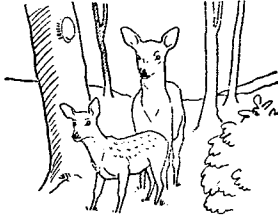
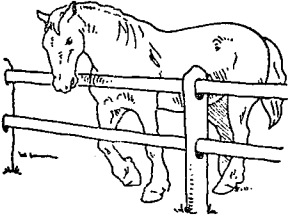
TEST 2. SENTENCES

Metropolitan Readiness: R

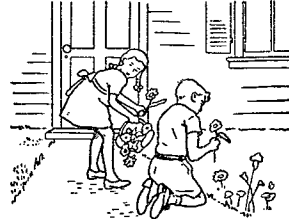
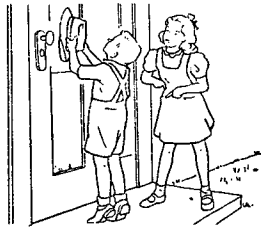
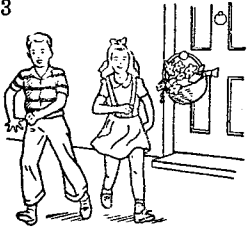
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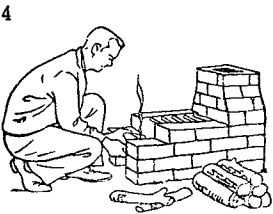
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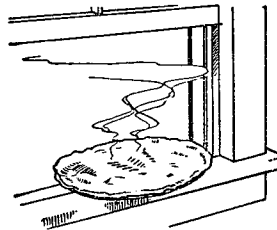
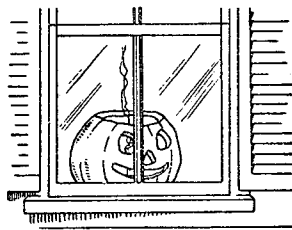
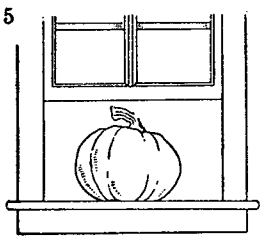
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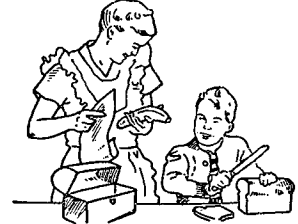
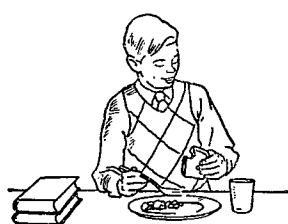
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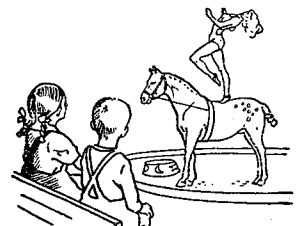
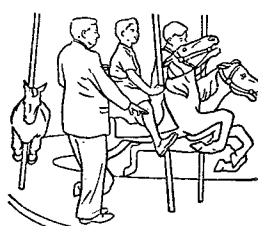
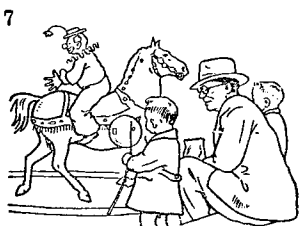
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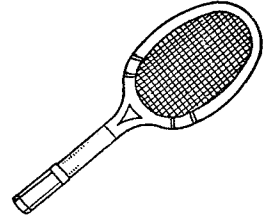
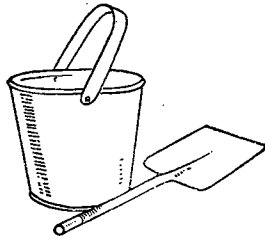
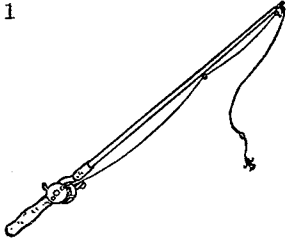
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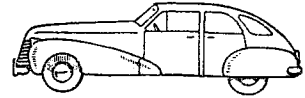
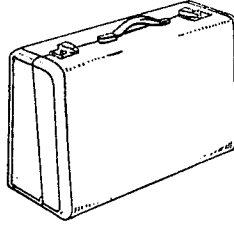
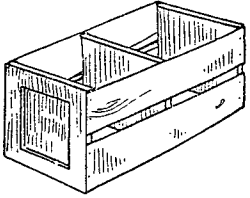
TEST 3. INFORMATION

Metropolitan Readiness: R

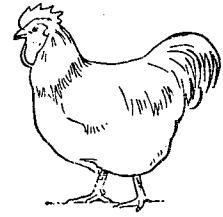
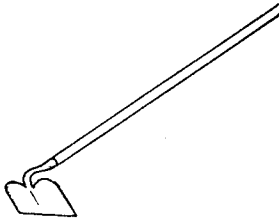
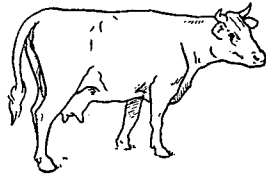
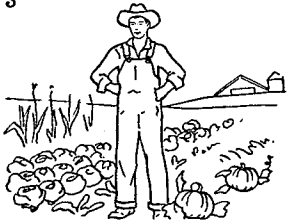
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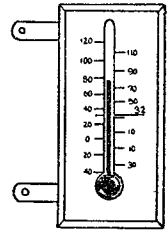
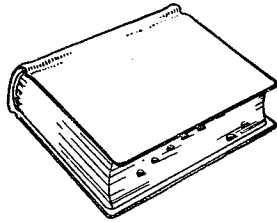
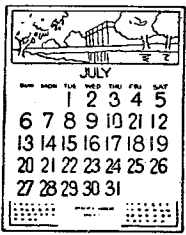
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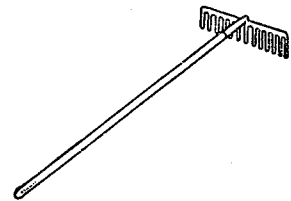
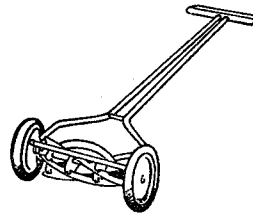
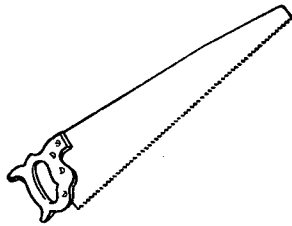
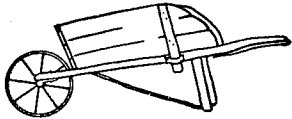
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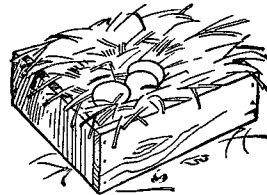
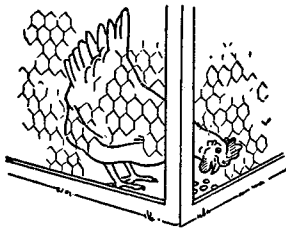
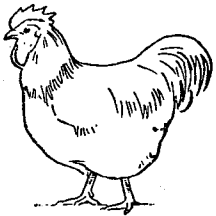
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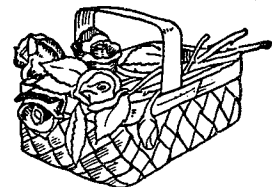
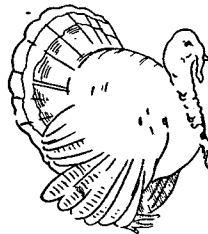
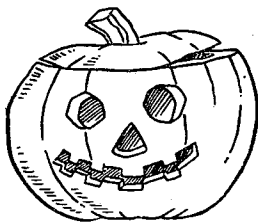
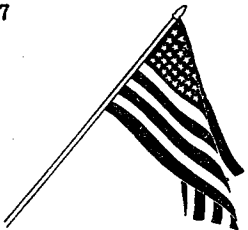
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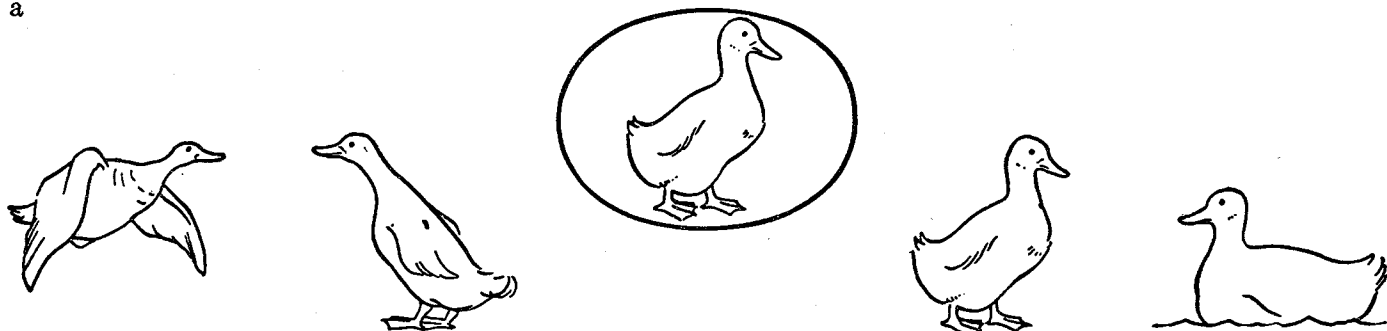


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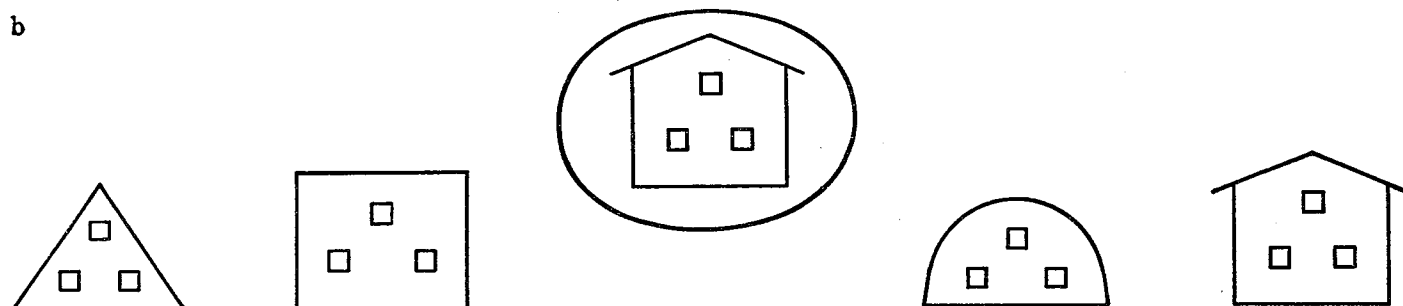


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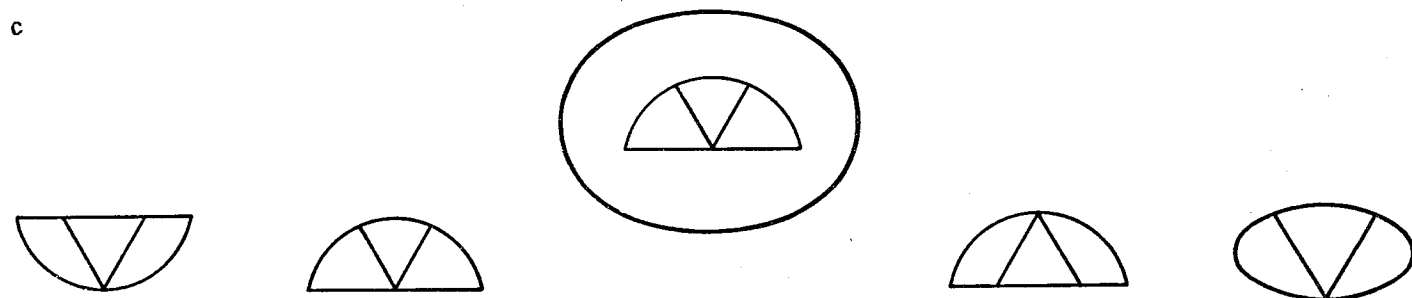
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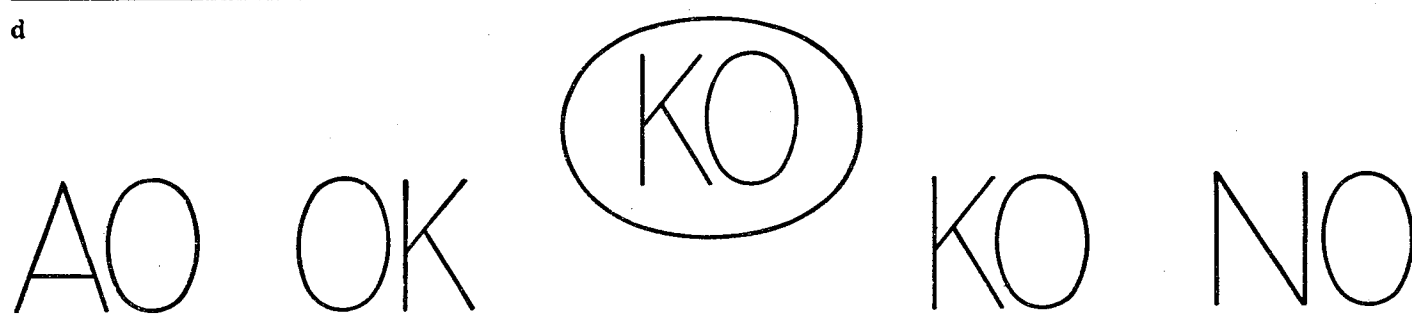
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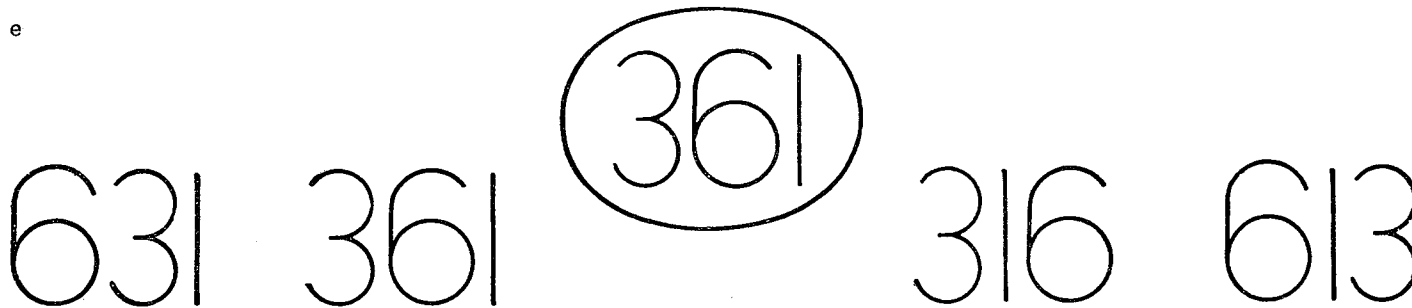
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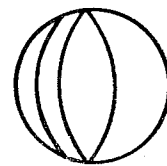
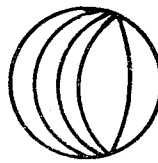
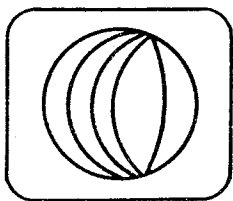
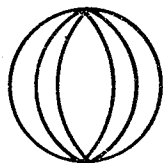
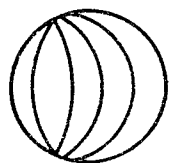
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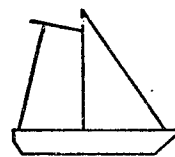
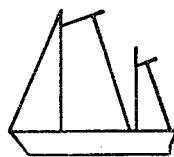
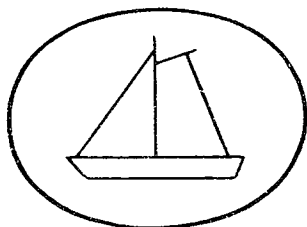
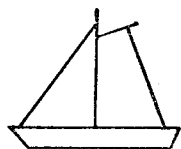
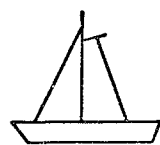
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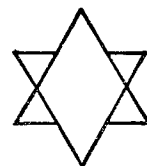
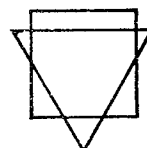
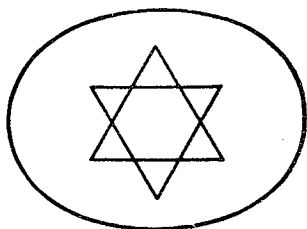
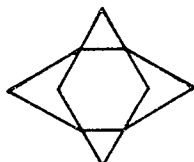
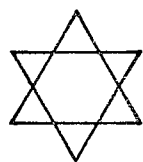
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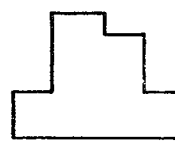
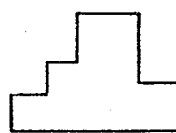
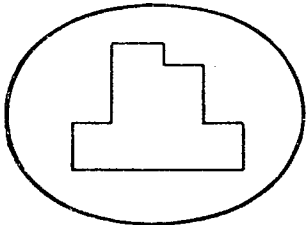
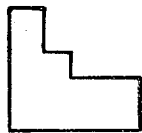
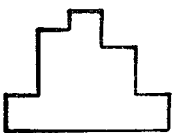
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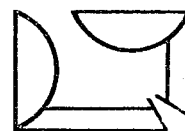
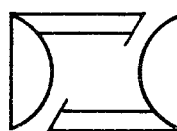
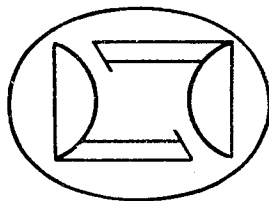
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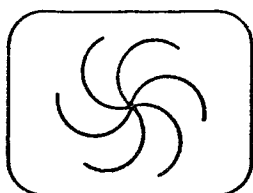
10



11



12



TEST 5. NUMBERS

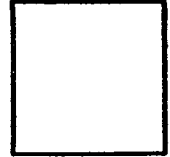
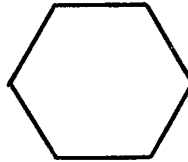
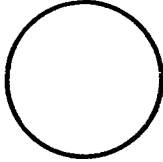
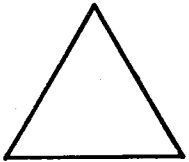
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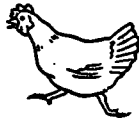
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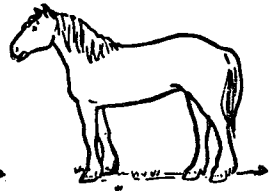
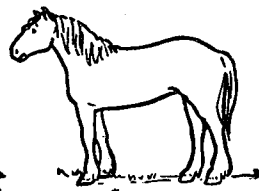
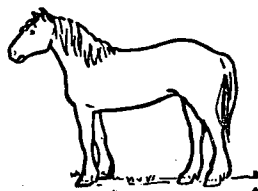
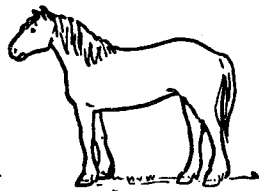
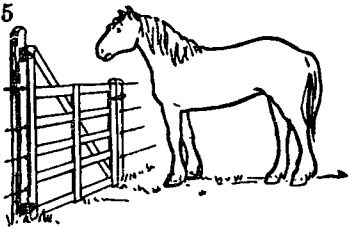
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4



5



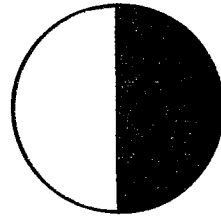
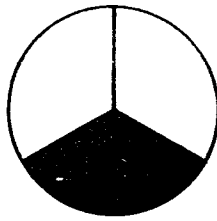
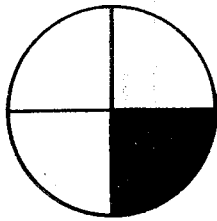
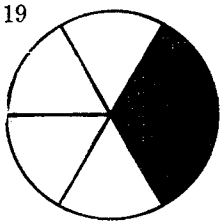
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9-11



19



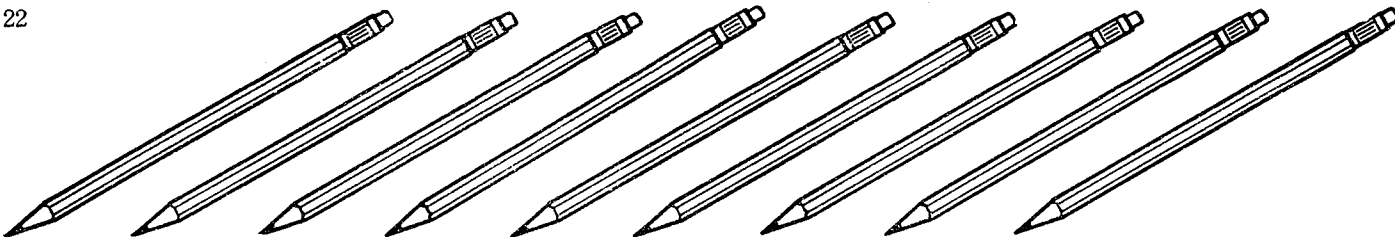
20



21



22



23



24



Metropolitan Readiness Tests

BY GERTRUDE H. HILDRETH, PH.D., AND NELLIE L. GRIFFITHS, M.A.

TEST : FORM S

FORM

S

NAME _____ BOY _____ GIRL _____ DATE OF TESTING _____
 Year _____ Month _____ Day _____
 TEACHER _____ SCHOOL _____ DATE OF BIRTH _____
 Year _____ Month _____ Day _____
 CITY _____ COUNTY _____ STATE _____ PUPIL'S AGE Yrs. _____ Mos. _____
 GRADE _____ NUMBER OF MONTHS KINDERGARTEN TRAINING _____

This space is to be used for drawing a man.

TEST	RAW SCORE
1. WORD MEANING	
2. SENTENCES	
3. INFORMATION	
4. MATCHING	
Total Tests 1-4	
5. NUMBERS	
6. COPYING	
Total Tests 1-6	

READING READINESS

SUM OF SCORES TESTS 1-4	LETTER RATING	READING READINESS STATUS

NUMBER READINESS

SCORE TEST 5	LETTER RATING	NUMBER READINESS STATUS

TOTAL READINESS

SUM OF SCORES TESTS 1-6	LETTER RATING	TOTAL READINESS STATUS	PERCENTILE RANK

DRAWING A MAN
TEST

RATING

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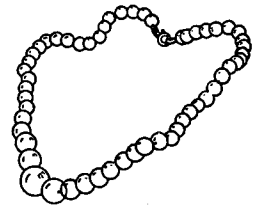
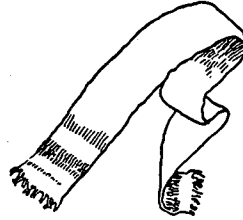
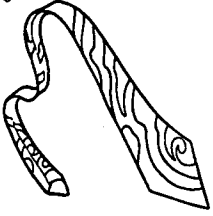
PRINTED IN U.S.A.

MRT:S

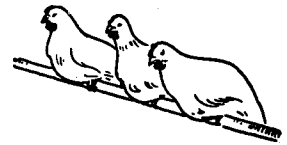
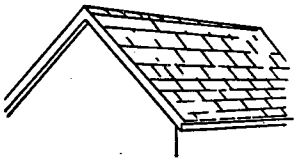
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a

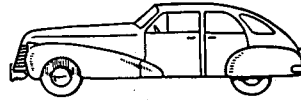
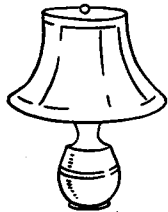
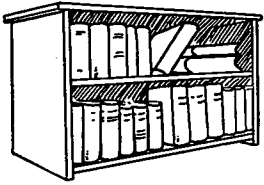
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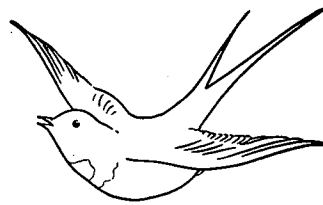
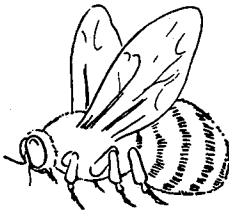
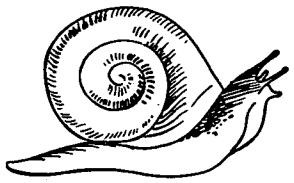
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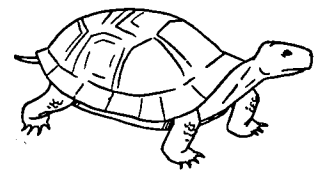
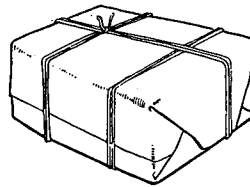
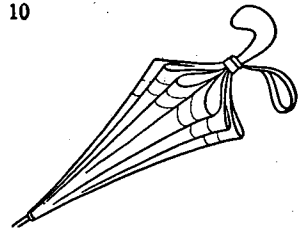
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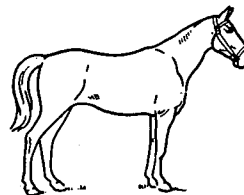
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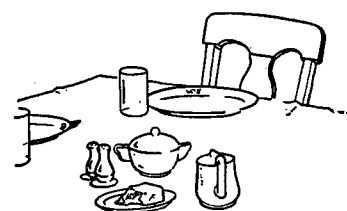
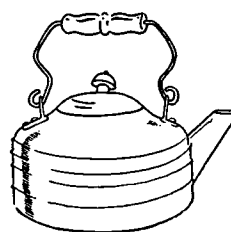
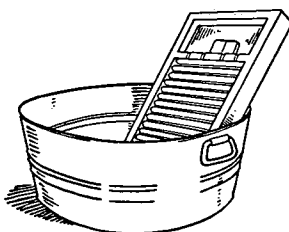
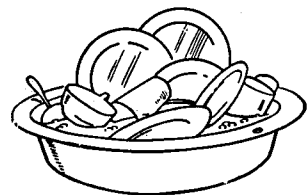
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11



12

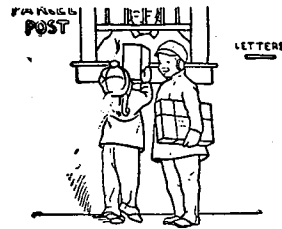
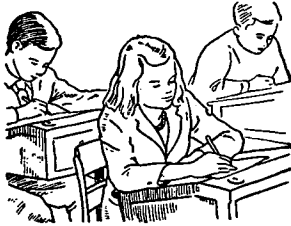


TEST 2. SENTENCES

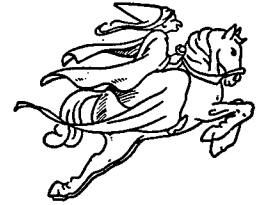
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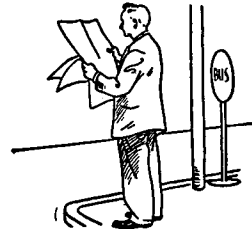
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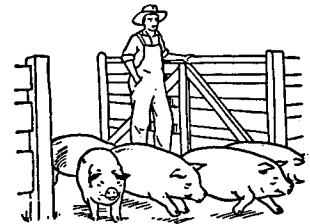
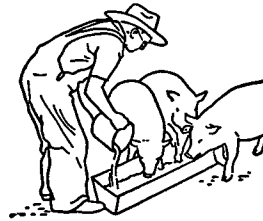
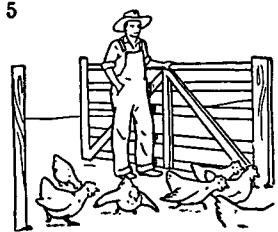
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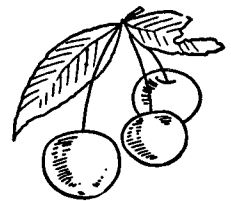
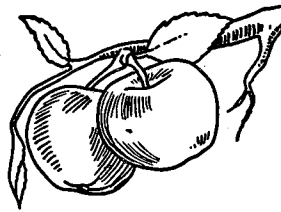
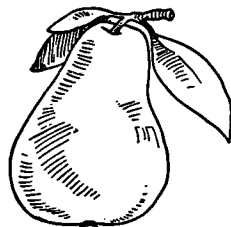
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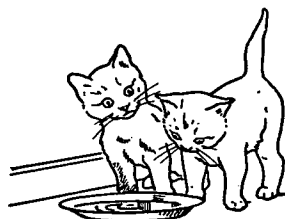
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6

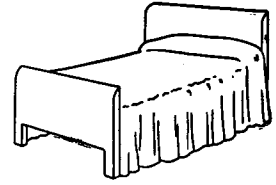
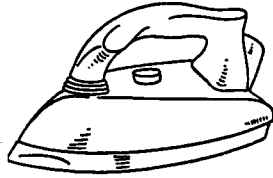
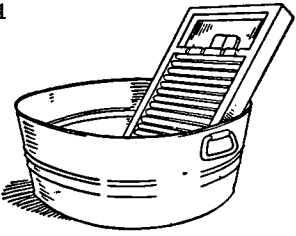


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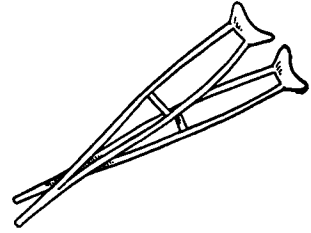
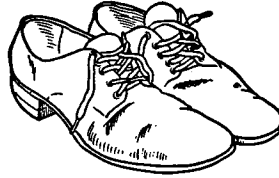
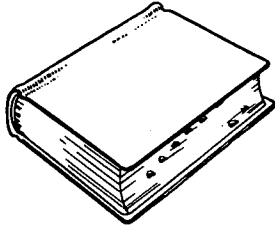
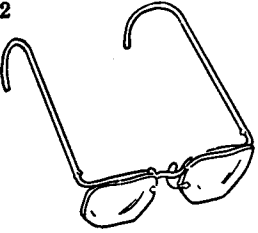


TEST 3. INFORMATION

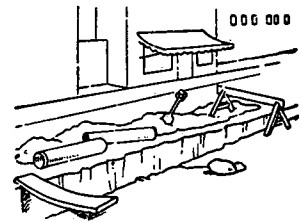
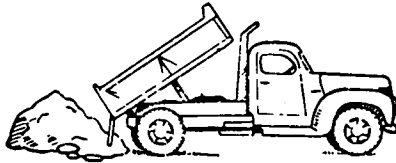
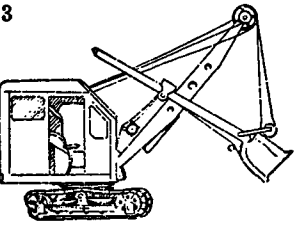
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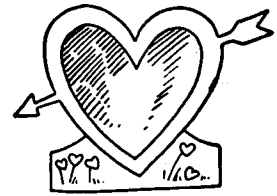
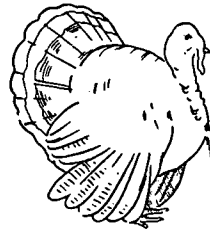
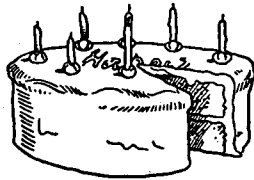
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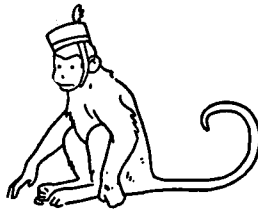
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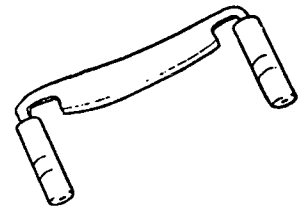
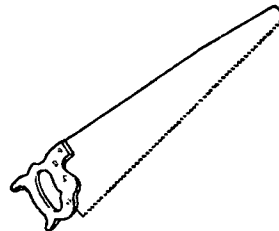
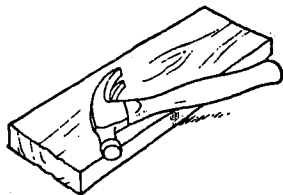
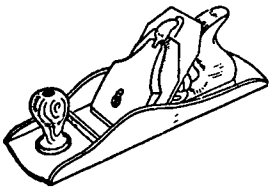
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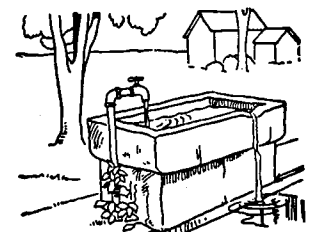
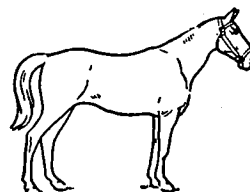
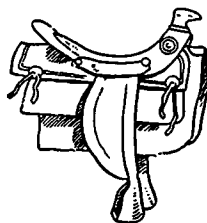
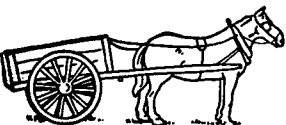
5



6

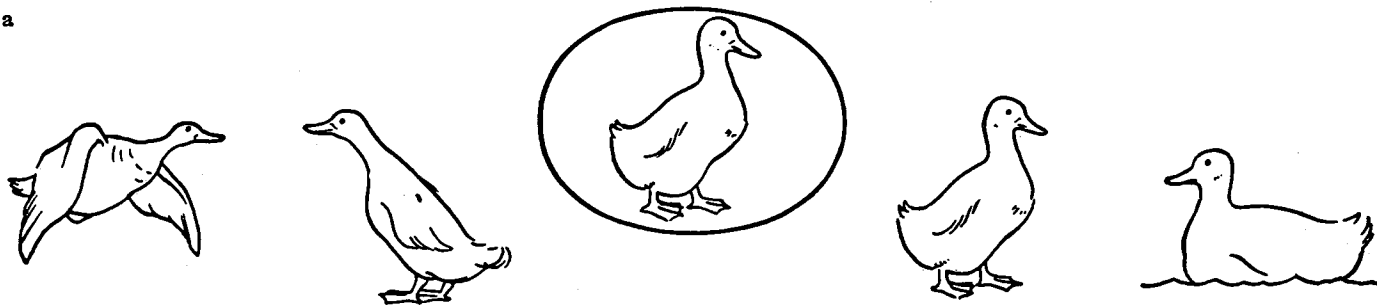


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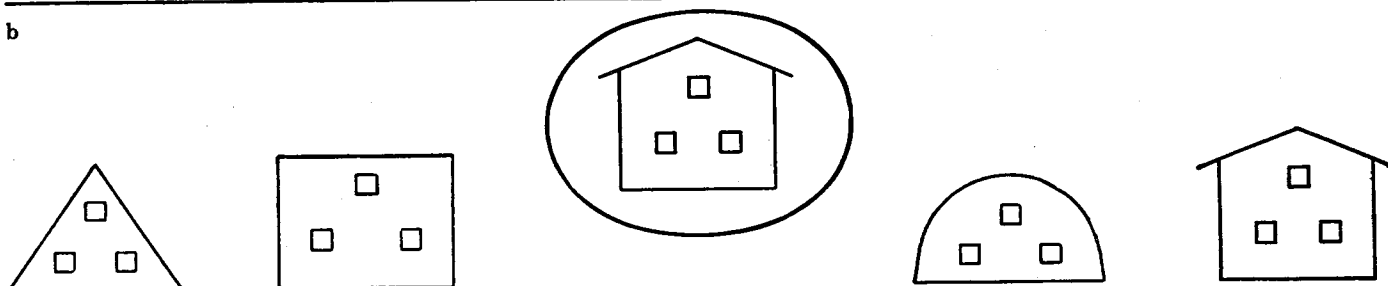


TEST 4. MATCHING

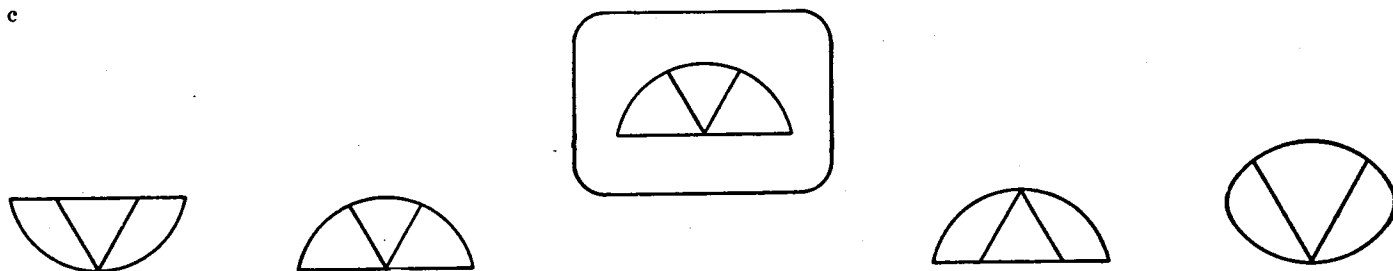
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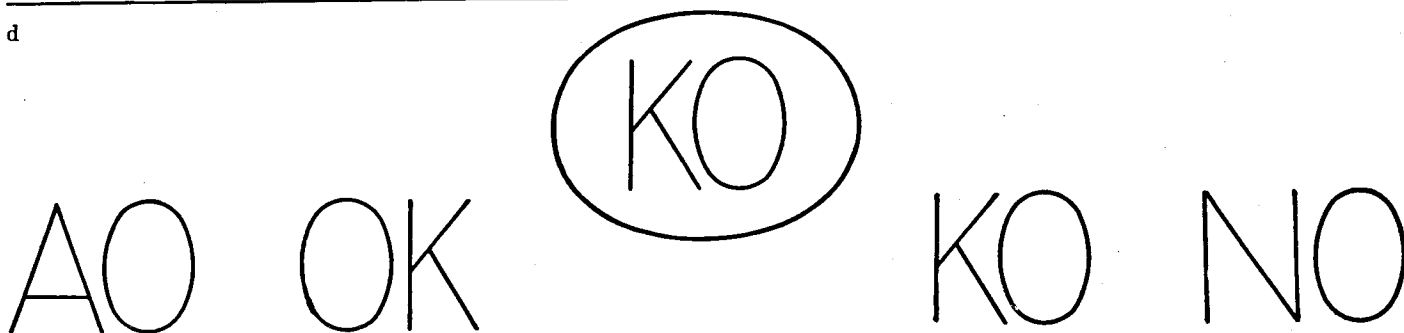
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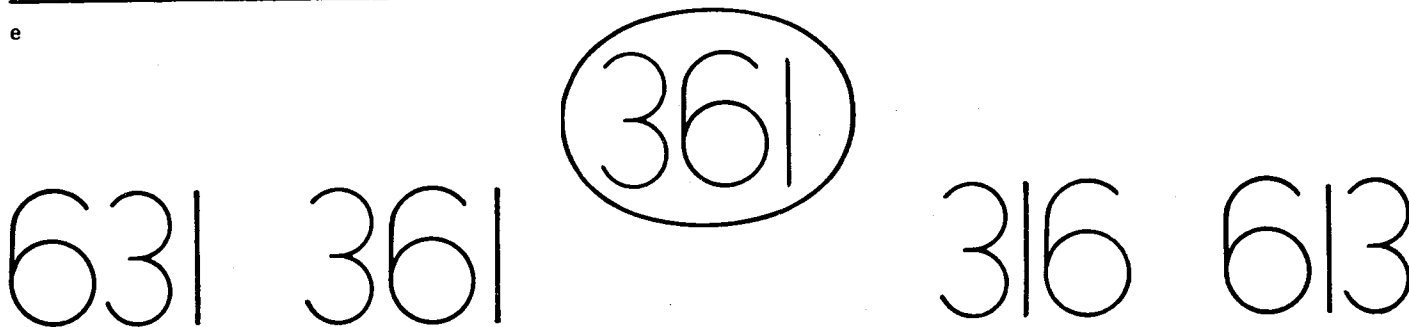
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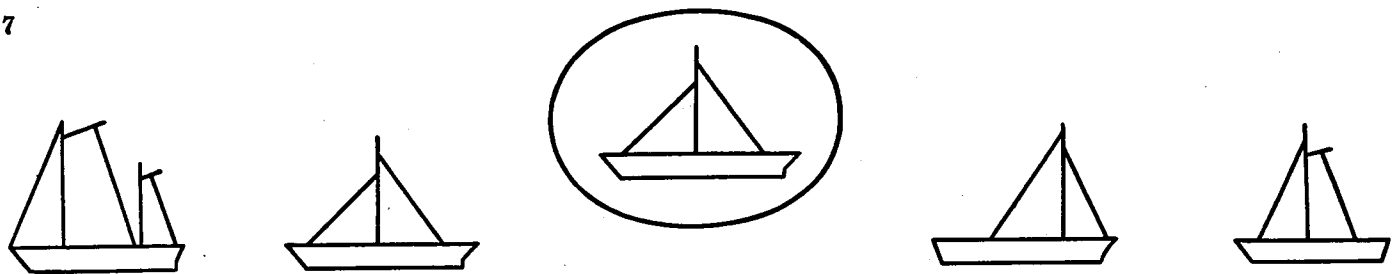
d



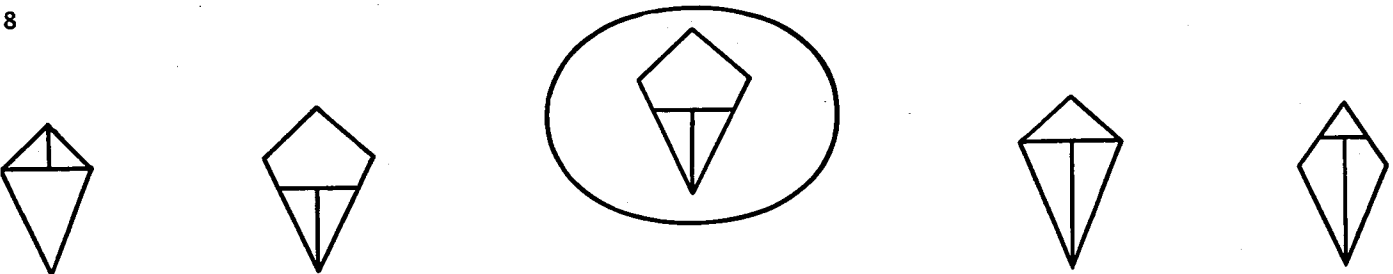
e



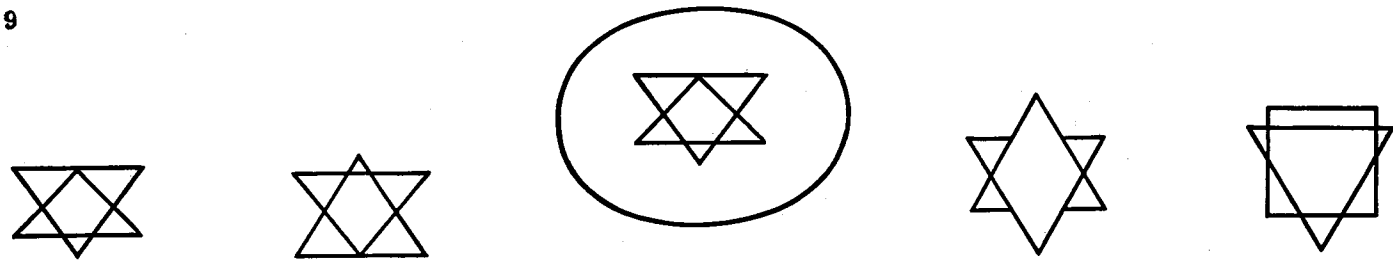
7



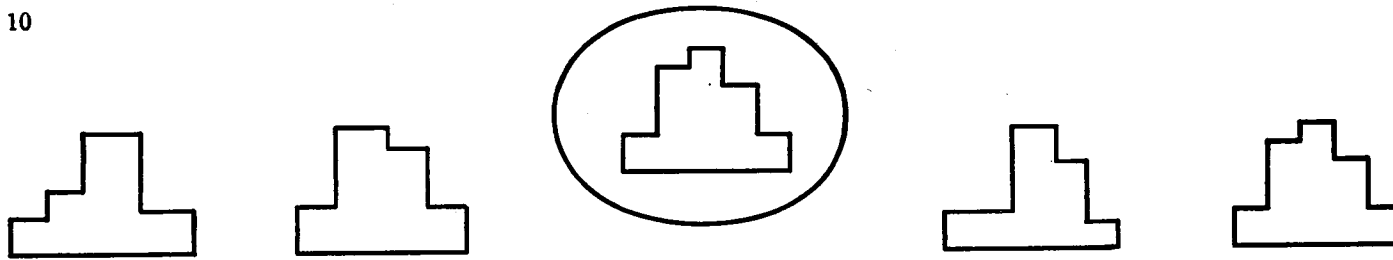
8



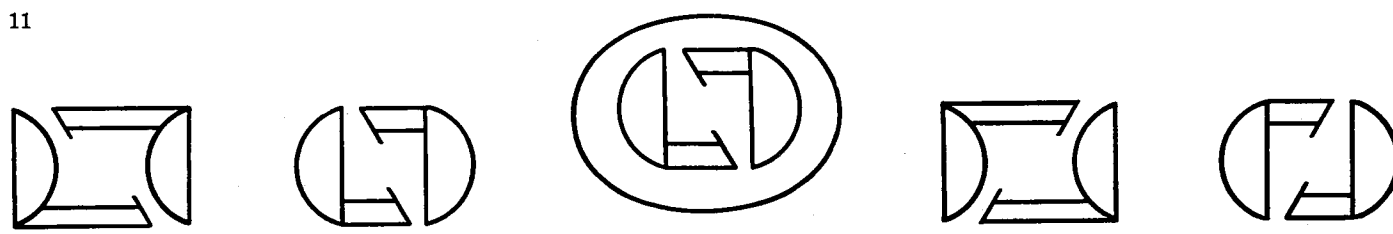
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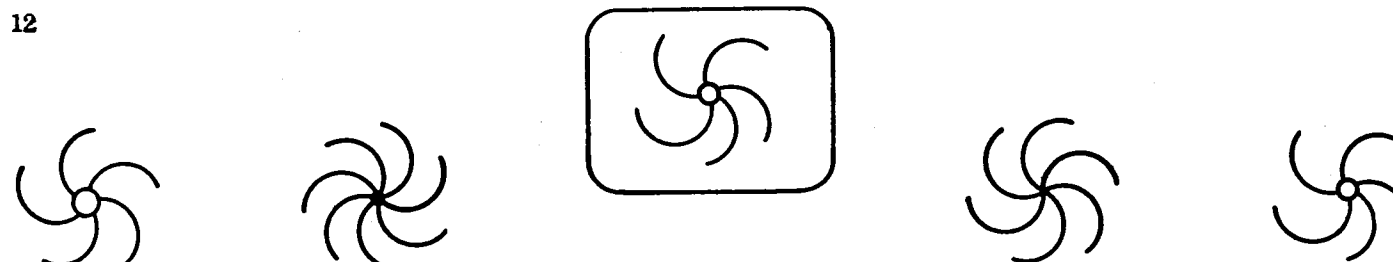
10



11



12



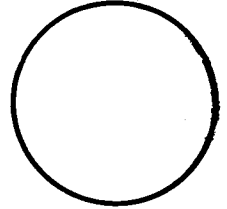
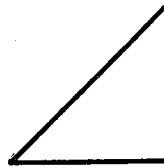
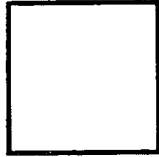
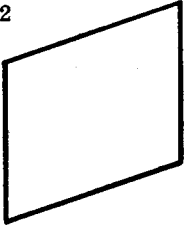
TEST 5. NUMBERS

Metropolitan Readiness: S

1



2



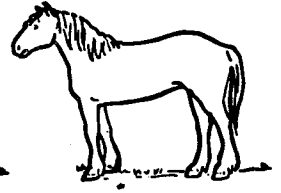
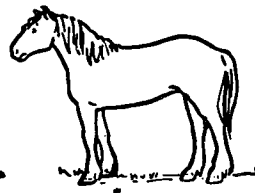
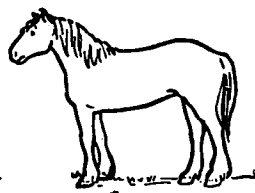
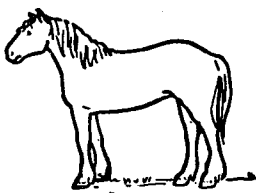
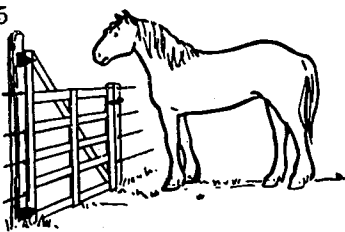
3



4



5



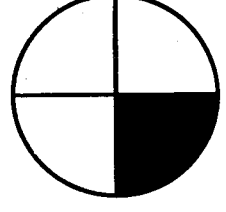
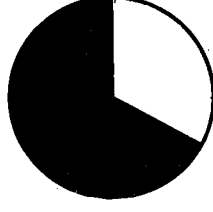
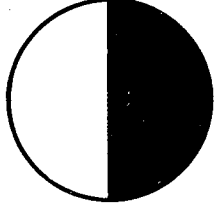
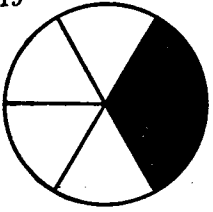
6-8



9-11



19



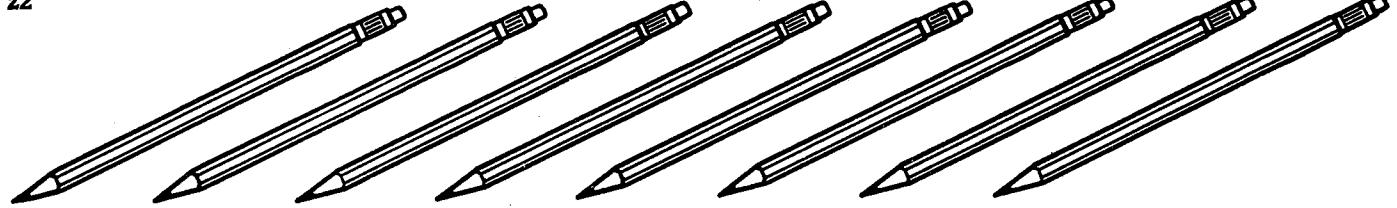
20



21



22



23



24

